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ABSTRACT

New Mexico, the fifth largest state, measures 390 miles from north to south and 350 miles from east to west. Six of the 7 life zones found in the U.S. are represented within the State's 77,866,240 acres. Its population has tended to congregate at altitudes of 7,000 feet and below, especially in areas where water is available. This booklet, prepared for use by schools with bilingual programs, presents information on New Mexico's past and present. The information covers: New Mexico's many environments, life zones, first inhabitants, and prehistoric agricultural communities; the Eve of the Spanish Conquest; the Apachean nomads; the State as a 17th century Spanish colony; New Mexico in the 18th and early 19th centuries; New Mexico on the Eve of Conquest by the U.S.; New Mexico as a U.S. territory (1846-1912); and New Mexico in the 20th century. A listing of 124 references is provided. The listing of New Mexico land grant claims includes such information as the: type (i.e., pueblo, individual, community, grazing, town, or originally individual later community), year, grant name, acres confirmed, acres rejected, and present ownership. (NQ)

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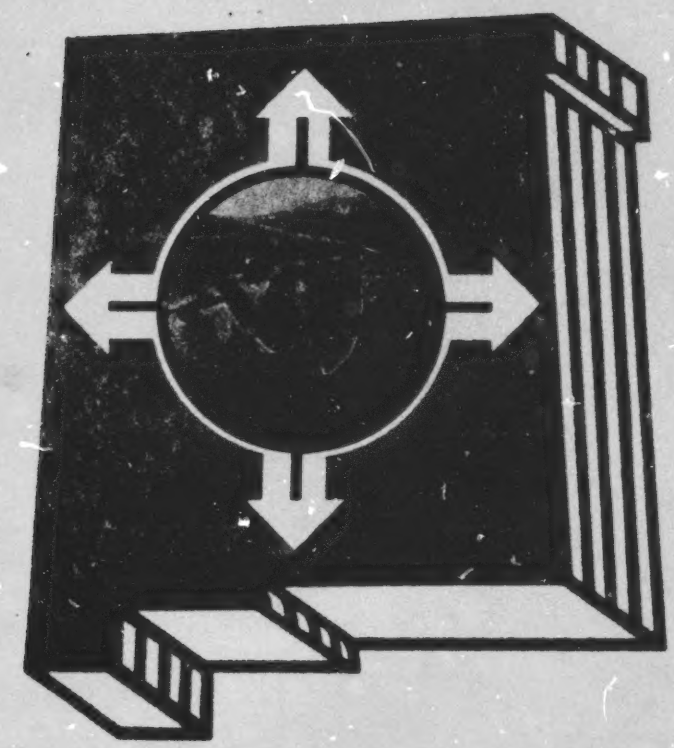

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BILINGUAL TEACHER TRAINING UNIT

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F O R E W O R D

The New Mexico Department of Education is pleased to present this booklet "The Lands of New Mexico" to the teachers of bilingual programs. This work was prepared under the auspices of the Museum of New Mexico.

We want to extend our appreciation to Dr. Frances Swadesh for having made this material available to us. This work was developed under her direction, and it represents much research and development of the themes included in the booklet.

Given the scarcity of teaching materials of this kind, it is a pleasure for us to bring this booklet to those schools with bilingual programs. Since our work deals with the promotion of bilingual-multicultural education, we are sure that this material, originally printed by the museum, will be of value for those who are looking for extra materials to include in their bilingual programs.

Henry W. Pascual
Director
Bilingual Teacher Training Unit

THE LANDS OF NEW MEXICO

Booklet prepared by the staff of a project entitled

OUR LIVING HISPANIC HERITAGE

Funded by the National Endowment for the Humanities

to the Museum of New Mexico

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This booklet has been prepared so that those who wish to study further what is visually portrayed in the exhibition may do so. The Supplement, containing a reference list and a listing of Spanish and Mexican land grants, is provided for those who wish to check our data.

We wish to thank the following for their valuable help: Gilbert Benito Córdova and Father Benedicto Cuesta who carefully and expertly revised the Spanish text; Drs. Marc Simmons and Allan Gerlach; and John Van Ness of Fort Lewis College who reviewed the historical section and suggested corrections and amplifications. Dr. Simmons, in particular, wrote the definition of the 17th century encomienda system which we have incorporated into the text.

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Above all, we must acknowledge our great debt to J. J. Bowden, author of an unpublished Master of Laws Thesis entitled Private Land Claims in the Southwest, and to the Library of Southern Methodist University for permission to reproduce the maps and the information on land grants which are presented therein. We have tried to update the information on land grant status to reflect something of the present situation, but must admit that we fall short of full accuracy. We are grateful to Mrs. Johnson of the New Mexico Supreme Court Law Library for allowing us to examine the 6-volume copy of Bowden's work which is kept there, and to Michael Rock for the protracted loan of his copy.

NEW MEXICO'S MANY ENVIRONMENTS

New Mexico is the fifth largest state of the Union, measuring 390 miles from north to south and 350 miles from east to west, a total of 77,866,240 acres.

Within this vast expanse of land, six of the seven life zones found in the United States are represented. Diversity of environments is due to sharp variations in altitude, ranging from less than 3,000 feet above sea level to more than 13,000 feet. The Continental Divide bisects the state in a north-south line running west of the Rio Grande Valley. The land slopes downward from high plateaus in the north, punctuated by the uplift of many discontinuous mountain ranges and vast networks of mesas.

Population in New Mexico has tended to congregate at altitudes of 7000 feet and below, especially in those areas where water is available.

LIFE ZONES IN NEW MEXICO

1. The Lower Sonoran Zone

This zone covers 19,500 square miles in the southern part of the state at altitudes below 5,000 feet. Here the dominant plant forms are creosote bush, black grama grass and bunch grass, mesquite, yucca, sotol, devil's claw, agave, prickly pear and other cactus. The area includes the Lower Pecos Valley north to Roswell, the Rio Grande Valley north to Socorro and the Deming Plain west to the state border.

Winters are warm in this zone and summers are hot. The land is arid with an annual rainfall that varies between 1 1/2 to 12 or 15 inches, falling mainly in the summer. Wherever there is water, a long growing season is possible. Principal animals are the white tail deer, coyote and fox.

2. The Upper Sonoran Zone

This zone covers some 78,482 square miles in New Mexico, or about two thirds of the state's total land area. It ranges from 5,000 to 7,000 feet. Most of the grazing and agricultural land of the state lies within this area, whose natural growth is principally blue grama, galleta and other grasses, juniper, piñon, live oak, mountain sycamore, prickly pear, agave and yucca. The topography includes foothill country, high plains and mountain valleys.

Within the altitudinal range of the zone, great extremes of heat and cold are infrequent. There is light snowfall in the winter and rainfall averaging 12 to 18 inches per year, with the higher rainfall in the mountain valleys. The grasslands used to support great herds of buffalo, antelope and other grazing animals. Half of the Llano Estacado of eastern New Mexico is in the Upper Sonoran zone as are the plains north of the Canadian River, the Pecos Valley north of

Roswell, the San Agustín Plains, the Upper Rio Grande and Gila Valleys and the Colorado Plateau of northwestern New Mexico, from the Zuñi River north to the San Juan Basin.

3. The Transition Zone

This zone covers 19,000 square miles of New Mexico, at altitudes of 7,000 to 8,000 feet on northeastward-facing slopes and of 8,000 to 9,500 feet on southwestward-facing slopes. Principally, the zone consists of broad mesas and mountain sides in the higher ranges, which have profuse stands of yellow pine and abundant grasses. It is a zone of fairly ample rainfall and of running streams.

4. The Canadian Zone

This zone covers 4,000 square miles at altitudes from 8,000 to 12,000 feet, depending on area and exposure. It is here that dense forests of spruce, pine, fir and aspen are found. Here snow remains until late in the spring. Rains are heavy, feeding mountain streams near their source.

5. The Hudsonian Zone

This is a narrow zone of 160 square miles along the timber line of high mountain slopes, generally at an altitude of around 12,000 feet. Stunted Engelmann spruce, cork-barked fir and foxtail pine grow here. The zone is covered with snow during 7 or 8 months of the year, but in the late summer there are abundant grasses in high pastures.

6. The Arctic-Alpine Zone

This zone includes only 100 miles of New Mexico, at altitudes of 12,000 feet or higher, the highest peaks of the Sangre de Cristo Mountains. This is tundra country. During the brief season free of snow, hardy alpine plants make a matted ground cover.

THE HUMAN EXPERIENCE ON NEW MEXICO LANDS

People have lived in New Mexico for at least 12,000 years, possibly for as long as 40,000 years.

We have a clear, though incomplete, record of a succession of life styles which indicate various ways of relating to the total physical and social environments of different regions of New Mexico in different periods. The record also shows that the environment itself has been in constant flux.

The record further shows that the human populations of various periods and traditions in various regions of New Mexico, through their diverse settlement and subsistence patterns, have made their mark on the physical environment.

MAN AND LAND IN PREHISTORIC NEW MEXICO

NEW MEXICO'S FIRST INHABITANTS

Who came first, and when?

Unlike the Old World, the New World has no sequence of human skeletal remains and stone tools going back a million years. Here, the question is whether man came across the Bering Strait into the New World at some interval during the Ice Age, or came only at the end of the Ice Age.

Some archaeologists point to the fact that primitive-looking stone tools have been found either scattered on the surface of the ground or in stratified deposits from North America to the tip of South America and that, wherever dating of these tools is possible, the evidence suggests human occupation of the New World as far back as, possibly, 40,000 years when there was a land bridge.

The argument goes that the "Siberian Chopper-Chopping Tradition" of pounding and cutting tools was brought across the Bering Strait into the New World midway during the Ice Age, at a time when animals and man might have crossed.

The chipped tools found in Siberia and in the New World seem to be completely disassociated from the finely flaked stone projectile points used by Postglacial hunters of both continents. This has led some archaeologists to classify the older tools as those of a "Pre-Projectile" technological level. They say that, despite the seeming crudeness of the tools, they would be adequate to secure subsistence at an interglacial interval when plant and animal food resources were abundant.

In New Mexico the dating of tools of this type has been impossible thus far, especially because very rudimentary chipped stone tools have been used well into historic times for utilitarian pounders and scrapers. Since the tools can't be dated, they can't be assigned to a particular technological level. It is interesting, however, that chipped tools of a chert obtained on or near the Pedernal Peak west of Abiquiu have been used from time immemorial in a wide area, perhaps serving as items of early trade.

We can only surmise that New Mexico's first residents may have been food gatherers and hunters of small game, who did not need an advanced technology to survive because plant and animal food sources were more abundant at that time than at any later period.

POSTGLACIAL BIG GAME HUNTERS: By 12,000 years ago the glaciers of the Ice Age were retreating from the North American continent. The climate was moist, with cooler summers in New Mexico than we have today, and with many pluvial lakes and playas, water-filled depressions. Plant life abounded, providing food for many types of mammals which are now extinct, including giant mammoths, mastodons, buffalo and sloths, and small horses and camels.

Hunters equipped with spears followed the mammals on their wide range from one grazing area to another. The hunting groups appear to have been small bands, whose campsites were occupied for short periods. Some areas, however, seem to have been revisited. Larger sites are located on plains, and broad valleys, occupied perhaps during the summers when bison, in particular, congregated in herds. Small sites are scattered in foothills, perhaps the winter quarters of small groups; during this season, bison tend to seek shelter from winter winds, scattering into foothills and valleys.

The stone tools of the hunters are virtually all that remains for us to study. Most are tools associated with hunting, but the occasional grinding implements found at campsites prove that plant foods were also gathered and processed.

We can only infer from the presence of numerous scraping tools found at kill-sites that the big-game hunters used the hides of the animals they bagged, presumably for clothing and perhaps also for shelter. No objects of hide remain. Likewise, there are no tools or tool-parts of wood used by these hunters until the very end of the Postglacial period, but we infer that some wood was used. Spear points would need spear shafts. It is not yet established that some archaeologists also think the earliest big-game hunters used the atlatl (spear thrower) but a wooden atlatl hook was found in a Colorado cave containing remains of big game hunters from the end of the Postglacial period.

No skeletal remains of big-game hunters have been found in New Mexico, but it is safe to guess that their appearance was not much different from that of contemporary big-game hunters of nearby areas whose remains are well attested. These people have been described as Indians of modern type and for this reason their culture is often called Paleo-Indian.

Several different groups of hunters lived in New Mexico, overlapping one another in time and often occupying parts of the same areas. They are known by the type names of their spear points. Sandia points, named for the cave northeast of Albuquerque where they were first found, may be very ancient but have not been accurately dated. Clovis is the oldest of the dated types, dating back as far as 15,000 years. The type-name comes from the eastern New Mexico town of Clovis near which such points were first found. Clovis points, however, are found more frequently on the plains east of New Mexico than within the state.

A recent detailed study of tool technology in the Central Rio Grande Valley, based on surface remains, located only one Clovis site and one Clovis locality, compared with 15 sites and 14 localities containing Folsom points, the point type of this period most commonly found in New Mexico. "Localities", as compared with "sites", have few implements.

Folsom sites are found throughout New Mexico and eastern Colorado. In the Central Rio Grande survey, Folsom points and scrapers were most commonly associated with base-campe sites near playas, where animals came to drink. "Armament" camps, where spear points were

made preparatory to the hunt, were found near grazing areas, and "processing" camps with many scrapers were found near the kill sites.

Folsom hunters apparently specialized in bison hunting. They usually located their camps downwind of the grazing areas, typically to the north. Apparently they made no effort at concealment, perhaps because the great prehistoric bison were not man-shy. The hunters located close to "trap" areas, steep-sided arroyos or lava formations into which animals could be driven for the final kill.

Another more localized type of New Mexican tool assemblage is Belen, found near the town of that name. The hunters who used Belen tools lived when a drying trend had set in, when the playas were no longer a year-round source of water and when the game herds had been reduced. Belen base camps are located at some distance from playas, generally at or near a good overview of the grazing area. The Belen hunters are considered to have been somewhat later than Folsom.

Cody tool assemblages are distinctly later than Folsom. Base camps are located far from playas, near the streams, rivers and springs where animals watered, at a time when the drying trend was pronounced.

Later in the Postglacial period, around 6000 B.C., climatic changes led to a more arid environment. The grasslands and permanent bodies of water on the North American continent began to dry up. The population of giant mammals gradually disappeared, along with the New World horse and camel. These animal species died out, scientists believe, not only because of the reduction in grazing lands but because the Postglacial big-game hunters hunted them to extinction. Some sites indicate that herds had been stampeded over cliffs, a technique that killed more animals than could be used at one time.

DESERT ARCHAIC FOOD GATHERERS: By 7000 B.C. a new way of life began to emerge in New Mexico, introduced from the west and south and parallel to cultural developments in the Great Basin to the north. This way of life, that of a mixed subsistence economy of gathering plant foods within a wide area, supplemented by the hunting and snaring of small game, partly overlapped the remaining areas of big game hunting. It was, however, an economy better adapted to the increasingly arid climate and reduced resources.

The Desert Archaic culture was such an efficient adaptation to arid climate and marginal resources that it has persisted into modern times, both as the full economy of the Basin tribes prior to displacement by Anglo-American populations and as a partial but economically and conceptually important aspect of the Pueblo economy.

The most universal implement of Archaic sites is the basin-shaped metate and the one-hand mano, used for grinding seeds. In later times, the metate has been horseshoe-shaped or trough-shaped and the mano has changed to a two-hand model, but grinding of seeds and wild plants continued long after the metate became devoted primarily to the grinding of corn. Other techniques and practices that arose in Desert

Archaic times have persisted into modern times with little or no modification. Originating in the Great Basin, these included woven blankets of twisted fur strips, seed beaters, fiber sandals, coiled basketry, earth ovens, digging sticks, fiber or hair nooses, nets and traps, tubular pipes, deer hoof rattles, medicine bags, bone dice and stick dice. In northwestern New Mexico, secondary human burial was practiced, along with ceremonial grave goods that mark the beginning of customs that continued into Pueblo times.

Less is known about the hunting habits of the Desert Archaic people of New Mexico than about gathering and grinding, although the abundance of Archaic dart points discharged from atlatls make it clear that they also hunted. It seems logical that they hunted most frequently in the wintertime, when there were no seeds to be gathered and when game was to be found at lower altitudes. The historic Pueblo pattern of winter hunting appears to hark back to much earlier times, perhaps as early as the Desert Archaic period.

The first Archaic sites were recognized in southeastern Arizona and southwestern New Mexico in and below the Mogollon Mountains. Until recent years, the "Cochise" sequences of that area were considered the best and perhaps the only model for transitions from early Archaic gatherers to village-dwelling farmers.

Now, however, extensive Archaic campsites have been found elsewhere in New Mexico, with sequences leading from early food gatherers of the "San José" complex to the adoption of maize growing, village life and Pueblo social organization. In the Plateau area of northwestern New Mexico, Archaic sites are so common that, in the Gallegos Wash south of the San Juan River, they are crowded together, a sign of repeated use rather than of overpopulation. South of Farmington, in areas where ground water comes close to the surface, rice grass was harvested year after year by Archaic food gatherers.

In the Tularosa Basin area of southeastern New Mexico, Archaic campsites are found from the valley floor to the high mountains indicating that the resources of several life zones were exploited, each in its season.

From the start, the food gatherers made more intensive use of their surroundings than the big-game hunters. They remained at one campsite for prolonged periods while gathering the resources of the surrounding area, and must have had intimate knowledge of their range. More and more, they began to practice a fixed yearly round, developing the pattern of exhaustive utilization of every food resource that they bequeathed to their modern descendants, the tribes of the Great Basin.

Before 3000 B.C. the food gatherers had gone one step further and were planting and harvesting such plants as chenopods (wild spinach, or quelites) and amaranth (pigweed). Shortly thereafter a primitive pod corn came under cultivation in the Mogollon Mountain valleys. Corn was originally a highland cultigen, as were bottle gourds and squash. All are thought to have been introduced to the United States Southwest along a highland route running from Jalisco in west central Mexico along the Sierra Madre Occidental. The frijol, or red kidney bean,

was introduced along the same route about 300 B.C. The addition of the frijol to the maize dict provided a stronger protein diet which could nourish a larger population.

The development of effective plant cultivation was gradual and during the thousands of years the process took, wild plants continued to be gathered, seeds to be ground into flour and small game to be hunted. Indeed, the Desert Archaic economy was never altogether replaced. Increased dependence upon crops, however, caused the gatherers to become more and more sedentary, as demonstrated by the accumulation of refuse piles and grinding stones at campsites, the wearing down of milling stones and the use of sub-surface storage pits for surplus foodstuffs.

Meanwhile, as newly crossed and improved varieties of corn were developed in Mexico, they were introduced into the Southwest and other areas of North America where, no doubt, they were further crossed and improved. Cultivated plants laid the basis for a new village society.

PREHISTORIC AGRICULTURAL COMMUNITIES

THE MOGOLLON PITHOUSE VILLAGERS: By 200 B.C. Cochise people in the valleys of the Mogollon Mountains were coming together in villages of 4-5 to 50 or more pithouses. Some of the houses were large enough to lodge an extended family group, and some of the largest pithouses have been identified as structures devoted to religious activity. The houses had an excavated base, often shallow and generally no more than a meter deep. Their average extension was some 14 square meters and the floor was rounded but not of uniform shape. The upper part of these houses was constructed of logs chinked with mud and branches, with one or more posts holding up the roof. Preferential location of the villages along ridges probably was for purposes of keeping water from accumulating on the house floors. There was no perceptible plan to the layout of villages.

By 200 B.C. the villagers were making well-polished brown and red-slipped pottery, excellent for storage of foodstuffs and water. The Mogollon Cultural sub-area spread eastward to the Great Plains, in various phases known collectively as Jornada, with the same sequences as western Mogollon.

THE ANASAZIS: Anasazi means "Old Ones" in Navajo and the term refers to a cultural sub-area which lay to the north and east of the Mogollon area, between the upper valley of the Little Colorado River, the San Juan Basin, the Chaco Canyon and the Middle Rio Grande Valley, extending also into southeastern Utah and southwestern Colorado. The first pottery used by the Anasazis at the beginning of the Christian era, was brownware thought to have been traded in from the Mogollon area. Later the Anasazis began to make grayware, at first unfired and crumbly, but soon of high quality with fine black designs over a white slip.

It is uncertain whether or not the Anasazis first started raising corn received from the Mogollon area. The varieties of corn which where first used by the Anasazis are not the same as those which long been used by the Mogollons. Perhaps corn was introduced by another route into the Anasazi area.

Like the early Mogollon villagers, the Anasazis built pithouse dwellings. These, however, were clay-lined and of a more complex design than the Mogollon types. By 700 A.D. Anasazi pithouse shape changed from round to rectangular, and some villages had surface storage rooms or dwelling rooms arranged in an arc or row, generally with a round pithouse, possibly a ceremonial kiva, or several pithouses south of the arc and in its shelter.

The early stages of Anasazi life are designated as "Basketmaker" because of the excellent baskets recovered from some sites. Archaeologists divide Basketmaker culture into three periods but for years searched in vain for sites they could identify as Basketmaker I. It appeared that the people of Basketmaker II were already so expert that there must have been a developmental period.

Nowadays the San José sites of the Desert Archaic stage are accepted as Basketmaker I because of the unbroken record of development from one stage to the next. As many San José sites are open and unprotected, baskets may have been made but could have not been preserved.

BASKETMAKER VILLAGES: The Anasazis turned to agriculture gradually, continuing to gather wild plants and hunt, as an important if not major part of their subsistence. By Basketmaker III times it is estimated that no more than half of subsistence depended on food crops. The needs of their agricultural pursuits, however, caused the Anasazis to move to sites somewhat removed from those of their Desert Archaic forebears. Basketmaker II-III sites in New Mexico are close to the bases of mountains and mesas and to other locations where there is an abundance of streams and of predictable runoff water from winter snows and summer rains. Characteristically, their pithouse sites are located on high benches overlooking river valleys. Ridge tops, valley bottoms, sand dunes and rock shelters also have Basketmaker II and III sites.

When the Anasazis became more successful as farmers, they began to cluster and move to locations that were lower in latitude and downstream of their first settlements. They grew their crops on floodplains, sand dunes, at the mouths of arroyos, on alluvial and colluvial slopes and near underground seeps at the base of mesas. Their fields were watered by rainfall, runoff and underground seepage; these means of obtaining maximum water for planting without actually engineering its delivery are still in use by the Hopis.

DEVELOPMENT OF ANASAZI PUEBLOS: After A.D. 700, the Anasazis, now well established as farmers, began to live partly aboveground. They

built unit dwellings of pole-and-daub (jacal) or stone and mud masonry construction. Buildings tended to be grouped in an arc or row, and to have storage rooms to the back rather than storage pits. Pithouses were increasingly relegated to ceremonial use.

Both in the Anasazi and Mogollon areas, the consolidation of a farming way of life appears to have been marked by a process of population clustering, perhaps caused by the indrawing of surrounding populations rather than by rapid population growth. At the same time, there are indications of intervillage competition for desirable sites. Reliance on digging sticks and stone hoes limited the potentially usable croplands.

By 900 A.D. the pueblos were smaller and more scattered, and true masonry had begun to supersede the jacal-type and stone-and mud dwellings. Population clusters appear to be no greater than, perhaps, an extended family or lineage-group. What is suggested by changing residence patterns is the fission of previous population clusters, for whatever reason, a process that has recurred again and again in historic Pueblo times.

A century later, settlements were again larger and more concentrated. Houses were now of well-laid stone masonry; their improved quality possibly resulted from an increased labor force. By this time the ceremonial kiva had evolved completely into a round subterranean structure, with a ventilator shaft which was a modification of the entrance vestibule of the earlier pithouse.

Water control systems came into use during this period. Although of simple construction, they were sophisticated in concept and no doubt required the combined labor of many persons to build and maintain. Some are linear grids made of lines of rocks set perpendicular to a slope. These grids held soil and slowed the rapid flow of runoff water. Sometimes several courses of rocks were laid with mud, creating terraces. Stone check dams were laid in several rows across streambeds. Small reservoirs were built and lined with clay and masonry, from which ditches carried water to the crops.

THE CLASSIC PERIOD

From A.D. 1100 to 1300 the Pueblo III or Classic Period floursihed. During this period the superb multistory structures of Mesa Verde and the Chaco Canyon were built. The Mogollon area adopted the housebuilding technology of the Anasazis. In the Pueblo III apartment house complexes, shared community life resembled that of the historic Pueblos.

The apartment house communities had defensive features, either by their location in rock shelters as at Mesa Verde or by their blank exterior walls, as in the Chaco Canyon, which could only be scaled by ladders. Smaller sites without the defensive features, apparently contemporary with the large pueblos, were often located at no great distance. The situation has been compared with that of an urban center with suburbs.

Near the great pueblos, there are evidences of intensive and extensive cultivation of crops. There are the grid borders, terraces and check dams of previous times, but the reservoirs are larger and the canals are longer. In some localities, water control systems reached a high level of sophistication. On Chapin Mesa of the Mesa Verde area of southwestern Colorado, rainwater was collected at the highest point on the mesa by a fanwork of ditches which fed into a main canal. This ran into Mummy Lake, a reservoir with a capacity of half a million gallons. A main canal carried water for drinking and household use from the lake several miles down the sloping mesa, passing four large pueblos. A diversion ditch carried irrigation water to terraced fields. Such a highly organized system, capable of greatly increasing agricultural yield, implied a large labor force for construction and maintenance. The Chaco Canyon also had complex water control and delivery systems. Interpueblo cooperation for use and maintenance of these systems seems likely.

Like the Pueblos of modern times, the ancient Pueblo people appear to have combined their practical efforts for subsistence with religious observances aimed at maintaining harmony with the forces of nature and with encouraging the growth of all life forms and the abundance of rainfall. The "Great Kivas" found at some pueblos could accommodate great crowds of people and suggest an emphasis on community-wide participation. We have every reason to believe that the Classic Pueblos, like the historic Pueblos, had a theocratic leadership which directed agricultural and building activities as well as ritual.

During the Classic Period, trade relations became more and more far-flung. Some archaeologists have emphasized the importance of relations with traders and possible colonizers from the Mesoamerican centers. Chaco Canyon in particular has yielded such exotic items as iron pyrite mirrors, mosaics and beautifully worked stone and shell objects. The fine ceramic wares and cotton cloth of the ancient Pueblos were traded over great distances for parrots and macaws, ocean shells and other items. New Mexico turquoise was mined and traded afar, some of the turquoise from Chaco Canyon sources even finding its way to Central Mexico. In the Jornada area, features of ritual life such as the Plumed Serpent Cult and Masked Dancers made their appearance and began to spread northward.

Rather suddenly, in the late 13th century, the area of Pueblo population shrank. Mesa Verde, the San Juan Basin, the Chaco Canyon and the whole Mogollon area were abandoned, while the population of the Rio Grande Valley grew, as well as that of the Acoma and Zuñi area and the Hopi country in Arizona. In the past, it was surmised that this shift of population was due to pressure of nomadic tribes, perhaps the Navajos and Apaches. However, diligent search has failed to show that these groups arrived in the Southwest prior to the late 15th century, nor is there indication of pressure from other nomadic groups.

Archaeologists have evidence that the contraction of Pueblo population took place under circumstances of environmental stress, including a shift in the precipitation pattern that led to drought and soil erosion, perhaps reducing crop yields to a critical degree. There

are also some evidences of possible intervillage and intravillage dissension, perhaps sparked by famine and perhaps fanned by the centrali zation of authority in theocratic village-states. To an extent, the very accomplishments of the ancient Pueblos appear to have contributed to their difficulties. For instance, erosion of soil was stimulated by the cutting of large trees in canyons and on mesa tops to supply roof timbers; it has been estimated that the Colorado Plateau area had large timber stands when first settled by the Anasazis.

NEW MEXICO ON THE EVE OF THE SPANISH CONQUEST

During the 14th and 15th centuries very large Pueblos were built along the Rio Grande and some of its tributaries. Cultivated fields were found in the vicinity of these pueblos, both along the river bottoms and hillsides and on mesa tops. Simultaneous planting in a variety of locations helped to guarantee some sort of crop no matter what the weather pattern, it seems.

Linear and rectangular grids covered large areas, especially on mesas above the Chama River and above the Rio del Ojo Caliente. The Ojo Caliente garden plots had rock alignments running for 5-6 square miles, the cobblestones having been quarried from the hillsides and carried to the mesa top. Channels dug across slopes apparently carried the water draining from higher foothills to the garden areas, but there were no larger irrigation ditches. Quantities of gravel in the garden beds are thought to have been a form of mulch on which moisture could condense in the cool of the morning and which would hold moisture around the plantings.

An agricultural innovation of the Pueblo IV farmers was the building of irrigation ditches carrying water from permanent streams. Positive proof of this innovation in the 14th-15th centuries is lacking, but the chroniclers of the Coronado expedition (1540-1542) reported that the southern Tiwas (from present-day Bernalillo to Belen) diverted water from the Rio Grande to their fields by means of well-constructed ditches. Later in the 16th century, other explorers reported that irrigation ditches were used by the Tewas of the Española Valley, by the Piro Pueblos of the Lower Rio Grande Valley and by the farm communities of Acoma Pueblo.

Those Pueblos lacking access to the waters of a permanent stream with sufficient flow to provide for irrigation ditches were at a disadvantage. It is significant that both Zia and Pecos Pueblo leaders offered to help the Spaniards fight the southern Tiwas, apparently in hopes of acquiring irrigated lands on the Rio Grande.

Ever since the 8th centry, the Pueblos had been growing cotton on well-watered lands at lower altitudes in New Mexico. The well-woven and attractively painted cotton cloth made by the Rio Grande Pueblos was a popular trade item among Indians who did not grow cotton. Turkeys were also raised, primarily for their feathers, with which warm robes were made. Pueblo weavers have been men, at least since before the time of the first Spanish reports. Another

popular item of trade from the late prehistoric Rio Grande Pueblos was pottery decorated with lead glaze paint. Miners with stone tools hacked out lead ore from veins in the Cerrillos hills, the San Pedro mountains, the mountains above Pecos and other areas. This was a laborious procedure, but in the four hundred years that glaze pottery was made in the Rio Grande Valley (14th-17th centuries), a great deal of lead ore was extracted.

The chroniclers of the Coronado expedition noted that the pueblos they visited were all built defensively, accessible only by ladders which the residents pulled up at night. Apparently the main cause for these precautions was a current state of unfriendly relations among many Pueblos, but new populations had come into New Mexico whose way of life was very different from that of the farming villagers. These were the Apachean Indians (Apaches and Navajos) whose relations with the Pueblos were varied and changeable.

THE APACHEAN NOMADS

In late prehistoric times, a segment of the great Athapaskan cultural and linguistic group of western Canada moved southward. Some branches settled in northern California while others went to the Southwest. At this time the high plains from eastern New Mexico eastward were teeming with buffalo, whose numbers and range were rapidly expanding after a severe drought in the mid-15th century.

The presence of the huge herds of buffalo made the Pecos and Canadian River valleys unsafe for village-dwelling farmers. Stampeding buffalo destroyed unfenced fields and even threatened the survival of dwellings. For the new immigrants, the Apachean or southern branch of Athapaskans, however, a life of hunting in close contact with herds of large animals constituted no problem. In the Canadian forests and plains they were already accustomed to hunting caribou, moose, and probably, buffalo, with bow and arrow.

Bands of Apaches apparently were occupying the eastern plains of New Mexico by the early 16th century. At first they had raided their new Pueblo neighbors to the west, but relations between the two groups were now largely based on friendly trade. Certain Pueblos had become centers for the Apache trade by 1540, Pecos being the principal center. Apaches brought meat and hides to trade for produce and cotton cloth. Both in the 16th and 17th centuries it was customary for Apaches to winter at Pecos, sometimes leaving their wives and children in the Pueblos while the men went hunting.

The Apaches of the plains not only traded buffalo meat but largely subsisted on the buffalo. Buffalo hide was used in making tents which could be raised or taken down with astonishing speed. They loaded their possessions on poles harnessed to large numbers of dogs who dragged them from place to place. The Apaches were fearless hunters and masters of the art of camouflage, hiding along buffalo trails to drop their prey with the first arrow, at close range and without disturbing the rest of the herd.

Since no farming groups could maintain villages on the plains because of the constant spread and proliferation of buffalos, the Apacheans became the first masters of the High Plains. Other tribes from the east, south and north also adopted the nomadic way of life on the plains.

Other Apachean groups filtered into the mountains west of the plains and into the Plateau country of the Four Corners, where New Mexico, Arizona, Colorado and Utah meet. The Mountain Apaches maintained trade relations with some Pueblos while raiding others. In the southern part of New Mexico, some bands depended for part of their subsistence on the root of the agave plant called mescal, hence the name "Mescalero" for the southeastern groups. All the Mountain Apaches hunted and gathered wild plants; however, prolonged contact and some intermarriage with the Pueblos caused many bands to adopt a limited pattern of growing corn. Customarily the plantings were largely left to themselves and the corn was harvested green. Some bands hunted the buffalo seasonally.

Another Apachean group later came to be known as the Navajos. These people appear to have been in the Plateau area, which in their tradition is known as Dinetah, by the late 15th century. The sparsity of early Navajo and other Apachean sites suggests that they were numerically weak groups at the outset, perhaps because they were still moving into the Southwest. The Navajos, however, began to multiply and spread in the 17th and, especially, the 18th century.

The influence of the Apacheans in New Mexico far outweighed their numbers, because of their farflung trade relations. Since all spoke a single language at the time (even today regional differentiation has not advanced too far to prevent mutual understanding), their language became useful in intertribal trade. Apacheans, or Pueblos who spoke their language, were valued guides and interpreters for the early Spanish explorers.

The mixed subsistence economy of the Mountain Apaches and Navajos encouraged a flexible approach to livelihood. The Navajos early became effective farmers, according to description provided by the Rio Grande Pueblos to 17th century missionaries. Certain Apachean bands became active raiders, first of Pueblo crops and later of Hispanic livestock and equipment, as will be described in later sections. Their forays had considerable impact on colonial and also, perhaps, later Pueblo (Pueblo V) building and settlement patterns.

NEW MEXICO AS A SEVENTEENTH CENTURY SPANISH COLONY

In 1598 the wealthy Don Juan de Oñate, heir to a silver fortune in Zacatecas, led a group of soldier-colonists to New Mexico. Oñate, who had won a contract to lead the colonization venture at his own expense, undoubtedly had in mind the glory of winning new lands for his sovereign and further riches for himself.

The approximately 130 soldiers, some with families, who followed Oñate probably anticipated some hardships but may have been lured to New Mexico by the possibilities of mineral wealth to be found, enticingly described by such 16th century explorers as Antonio de Espejo.

An unknown number of Mexican Indians, probably equal to if not greater than the number of soldiers, also accompanied Oñate. They were converts to Christianity and, although in service to the soldiers, appear to have combined their menial chores with the role of lesser conquerors. During the seventeenth century they were assigned lands for homes and garden plots in a quarter of Santa Fe which became known as "Analco" and was said to be the barrio of the Tlaxcalans. The Indians of Tlaxcala, a city-state in the Valley of Puebla in Central Mexico, had allied themselves with Cortés in the conquest of the Aztecs and had won favored status. Tlaxcalans accompanied conquest expeditions as they won new lands for the Spanish empire, receiving in exchange for their services the right to settle in newly won areas. "Tlaxcalan" was a term that seems to have covered all Indian soldier-servants in the conquest forces, including Otomís and Tarascans.

Whatever their dreams of glory, Oñate's forces were immediately faced with the problem of survival when they arrived at Okeh (San Juan Pueblo) in the early summer of 1598 and set up temporary headquarters. Crops in the area were withering in a severe drought. The San Juans had an irrigation ditch but were relying primarily on rainfall to save their crops. They requested the expedition's priest to pray for rain and, providentially, a heavy storm immediately followed. With the aid of the San Juan people, the colonists shortly began construction of acequias (irrigation ditches) in order to be ready to plant the following spring.

In 1610 the settlers moved from their first capital near the San Juan Pueblo to a new capital in Santa Fe, probably to comply with regulations against settling too close to native communities. Again, no doubt with the aid of the Mexican Indians and conscripted Pueblo laborers, they dug acequias, a main ditch running on each side of the Santa Fe River. One ditch brought water to the Governor's palace. The settlers built farms along both sides of the river, but only in a particularly wet year did the farms far below the plaza receive sufficient irrigation water for a good crop.

Santa Fe was the only colonial town (Villa) of the 17th century and was miles from the nearest occupied Pueblo. Many settlers, however, did not live in Santa Fe but either in or close to a number of Pueblos. These settlers had encomiendas, alcaldías and/or estancias.

The encomienda was a grant in trust made by a royal governor to a leading Spanish citizen allowing him to collect the tribute of an Indian community. For the privilege of receiving tribute, the proprietor of an encomienda grant (the encomendero) was required to support the religious instruction of the Indians and provide them military protection. In New Mexico this latter obligation assumed greatest importance. Thus here the encomienda was a kind of tax imposed upon the Indians and used to pay and support the military force. During the 17th century, there were few soldiers other than the 35 normally designated encomenderos. (The number 35 seems to have been established by the Viceroy Duque de Escalona about 1640).

Tribute was collected from each Indian household (which often included several families) at a fixed rate. As provided by law, tribute could be paid in produce of the land rather than cash. The Pueblos thus paid in corn, beans, turkeys, blankets and tanned hides. For a time the accepted tax was one Spanish bushel (a fanega) of corn and a cotton manta, or blanket or their equivalent in other produce, annually per household. Collections were made twice a year, in April and October.

As these tributary items were normally used by the Pueblos for themselves and for intertribal trade, the extra production and its diversion to the encomendero's possession caused hardship. Even harder on the Pueblos were frequent commands to till the encomendero's fields, herd his cattle and sheep, cook and clean his house, weave cloth on the Spanish loom and perform other chores. It was against the law to require uncompensated labor of the Indians, and it was also against regulations for encomenderos to live on their tributary lands. A number of them, however, did live on these lands. Some were named alcaldes (magistrates) thereby gaining civil authority over a Pueblo. Other alcaldes who were not encomenderos had living quarters in their assigned Pueblos. Some encomenderos, alcaldes and other influential settlers acquired estancias (farms) most of them conveniently near a Pueblo. The result of these living arrangement was the wholesale exploitation of the Pueblos and resulting disruption of their farming, family and community life.

The network of encomiendas, alcaldías and estancias was scattered from Taos south to Socorro and from the Estancia Valley in the east to the Hopi Pueblo of Awátovi in northeastern Arizona, then a part of New Mexico. The greatest concentration of settler population in the 17th century, however, was in the "Cañada" (vale) near San Juan Pueblo, running from present-day Santa Cruz to Chimayó. In the 1600's there were some 15 estancias in that area.

In the Santa Fe-Ciénega-Cerrillos-Galisteo area there were 9 estancias in the same period. Between Cochiti Pueblo and Alameda, there were at least 12 estancias and several more in the vicinity of present-day Albuquerque. From north of Isleta Pueblo south to Tomé there were 9 estancias, another 6 between Sevilleta and Senecú, 3 in the Taos Valley and 3 in the Estancia Valley near the Saline Pueblos of Abó and Quarai.

The Franciscan missionary network also brought resident missionaries to some of the Pueblos, a maximum of 30 at one time in the province, along with their aides and servants. The missionaries directed the building of churches and convents, as well as mission gardens and workshops in which the Pueblo Indians were to labor and receive instruction.

It is difficult to gauge the impact of the 17th century colonial population and government system on land and water use and development in New Mexico, although there can be no doubt regarding the oppressive exploitation of the Pueblos. Some Governors were among the worst exploiters, setting up virtual sweatshops for Pueblo and captive nomadic Indian labor in Santa Fe.

The domestic animals introduced by the colonists were strange to the Pueblos and changed their economy. Cows, sheep, goats and chickens provided new sources of protein food, while horses, mules and donkeys were ridden and also used along with oxen as draft animals. Only the dog-travois buffalo hunters of the plains had any previous experience of using beasts of burden.

Grazing livestock invaded the unfenced Pueblo garden plots and consumed the grasses in the river valleys which had formerly attracted deer in the wintertime, forcing the Pueblos to hunt further afield. The Pueblos no doubt learned a great deal about the management of livestock through their herding chores, although most were forbidden the use of mounts in the 17th century for fear of what they might accomplish with them in case of a rebellion.

The colonists brought with them a number of food plants hitherto unknown in New Mexico. These included canteloupes, watermelons, apples, peaches, apricots, pears, grapes, tomatoes and chile, the latter two native to Mexico. All these fruits were soon raised by the Pueblos. The colonists also introduced several garden vegetables, such as onions, cabbage, and the garbanzo (chick pea) as well as wheat, oats and barley, but new vegetables and grains never took the place of the traditional pueblo crops, corn, beans and squash. The colonists also brought medicinal herbs, and a great deal of exchange of herbal lore took place between the colonists and the Pueblos, who had extensive knowledge of regional herbs.

The colonists introduced advanced irrigation techniques which were adopted by the Pueblos, if not in the 17th century, then in later times. These included movable wooden ditch gates, flumes for carrying water over obstacles and engineering skills to carry water over hills when necessary. Metal shovels and hoes were aids to agriculture in general and irrigation activities in particular. The iron-tipped ox-drawn wooden plow was also an agricultural innovation in New Mexico, although the digging-stick continued in use for planting corn, including a metal digging stick issued to each settler by the colonial authorities.

It is unlikely that all these innovations really improved subsistence in 17th century New Mexico. The colonial system was parasitic on the Indians in so many ways that it constantly produced disruptions from

which all suffered. The colonists tried to take over trade with the plains nomads but, in the process, became so involved in taking captives to transport to the mines of Chihuahua and Zacatecas for forced labor that they called down the wrath of the nomads on all settlements, Hispanic and Pueblo. Forcing the Pueblos to produce a greater surplus and then appropriating this surplus for the enrichment of colonial functionaries created an unbalanced economy. In the latter years of the 17th century, many Pueblos escaped to live among the Apachean nomads, among whom many intermarried. As a result, trends of change in social organization, religion and land relations of the Apacheans were unleashed both before and after the 1680 Revolt of the Pueblos.

During the 17th century the Laws of the Indies that were in effect forbade the encroachments on Indian lands and labor that were practiced in New Mexico. Had these laws been observed, the impact of the 17th century colony on Indian life in New Mexico might have been relatively mild and even to an extent positive. As it was, the constant requirements of labor and interference with Pueblo ritual, a central focus of all Pueblo activities, led to intense bitterness on the part of the exploited Indians. This bitterness was intensified by the disastrous famine of 1670 and the epidemic which followed. The Indians had no natural immunity to diseases introduced from the Old World and suffered a much higher proportion of fatalities than the colonists.

Between famine, epidemic and escape to the nomadic communities, the number of Pueblos dropped in the 17th century. At the outset, it was estimated that there were possibly 100 Pueblos in New Mexico, with a population estimated at 60,000; by 1680 there were probably no more than 24,000. In the 18th century the trend continued, due to the same causes, so that by mid-19th century the number of Pueblos in New Mexico was fixed at its present number of 19.

During the 17th century and especially in the period of the Revolt and its aftermath in the early years of the 18th century, the close ties between certain Pueblos and the nomads began to work a quiet transformation in nomadic life. When the Pueblos fled they took livestock with them. The plains tribes, who had learned from the colonists how to take buffalo from the back of a horse, now became rich in horses. The Navajos acquired horses and sheep. Sheepherding transformed the yearly round of the Navajos from one of gathering plant foods within a wide range to one of seasonal shifts. They planted gardens which they tended intermittently, using sheltered valleys for winter grazing and mountain meadows for summer grazing. The Navajos and Apaches began to expand both in numbers and in occupation of land.

NEW MEXICO IN THE EIGHTEENTH AND EARLY NINETEENTH CENTURIES

The resettlement of New Mexico was not inspired by dreams of glory and fabulous riches. Rather, it was a holding operation to protect the northern frontier of New Spain both from attack by equestrian nomadic tribes sweeping in from the plains and from penetration and seizure by the French, whose traders were already among the Pawnees.

The new settlers had to be self-supporting and were selected accordingly. Most were experienced in farming and livestock raising. Some had special skills in metal-working, weaving, leatherwork and other crafts. Less than 40 families of refugees from the Pueblo Revolt returned with de Vargas, while nearly one hundred other families were recruited from the Valley of Mexico and the mining communities of Zacatecas.

The re-entry of Don Diego de Vargas and his soldiers into New Mexico in 1692 and the subsequent resettlement of colonists in 1693-1695 is called the "Reconquest". Yet the many elements of negotiation and accommodation between the colonists and the Pueblos before, during and after recolonization made for only partial conquest. The 1680 Pueblo Revolt succeeded in modifying colonial conditions.

The Pueblos won an end to encomiendas, which were banned throughout New Spain following widespread uprisings in the late 17th century. They also won their demand of no forced labor and no unpaid labor for settled Christian Indians (both the settlers and the Pueblos took captives among the nomadic Indians, and were in turn taken captive by them in the 18th century). The Pueblos also won, in principle if not always in practice, the exclusion or settlers from residence on their lands and in their villages.

Hostilities between settlers and Pueblos continued sporadically through the 1690's, flaring into open rebellion in 1696. The Tanos of San Lázaro and San Cristóbal, who had moved into the abondoned Cañada settlements following the 1680 Revolt, were in turn displaced by de Vargas for the purpose of establishing a new colonial villa. In 1696 these Tanos fled to the Hopi First Mesa where they have remained to this day. The last Tanos of the Galisteo Basin moved to Santa Domingo late in the 18th century.

All the Indians of Picurís Pueblo took refuge with the Cuartelejo Apaches of the plains, while those of Jemez fled to the Navajos of Dinetah. Pojoaque was abondoned until 1707 and the San Ildefonsans retreated to the top of their Black Mesa.

For years some Keresan pueblos were deserted. By 1699 a number of refugees from several Keresan pueblos had founded Laguna Pueblo near Acoma.

The Southern Tiwa pueblos were eventually reduced to two. The Sandias lived among the Hopis until the 1740's. When they returned to their Rio Grande pueblo they were accompanied by a contingent of Hopis who

remained at Sandia. Many Isletans and all the Piros accompanied the retreat of the colonists to El Paso in 1680. All the Piros and some of the Isletans remained in the El Paso area. They founded the communities of Ysleta del Sur, Socorro del Sur and San Antonio del Senucú.

During the turbulent years of the early resettlement, as some pueblos were temporarily vacated and others were permanently abandoned, the settlers began requesting grants in choice areas of the Rio Grande Valley. A number of grants were made, especially under the rule of Pedro Rodriguez Cubero (1697-1703) which encroached on Tewa lands in the Española Valley.

Regulations required that each pueblo have title not only to a minimal four square league block of land, with the possibility of additional grants, but that at least one league (a league was about 2.6 miles) in all directions provide a buffer between each pueblo and the nearest colonial settlement. De Vargas, however, established the New Villa of the Mexican Spaniards (Santa Cruz de la Cañada) closer to lands of the Santa Clara Pueblo than regulations allowed. Such encroachment cut off possible agricultural expansion and made it imperative that livestock be grazed at least 3 leagues from the pueblos. In the 18th century, the Pueblos raised livestock, which they may have acquired initially from the heirs of the fleeing settlers in 1680.

Most of the early grants were made to individual families and were small. However, the Cristobal de la Serna Grant, made in present Taos County in 1710, was said to be large enough to support 100 heads of family settling in towns and rances. The large Sebastian Martin Grant, north of San Juan Pueblo, supported 109 families in 1776 on its 51,000 acres, a total population of 554 persons in 4 settlements.

A third villa was added to the New Mexico colony in 1706, the villa of San Felipe de Neri, named Albuquerque in honor of the reigning viceroy of New Spain. Numerous grants were given in what had formerly been the lands of the southern Tiwas, although the lands of Sandia Pueblo were kept relatively intact in expectation of the return of its people from Hopi country. The Bernalillo and Alameda grants were made in 1701 and 1710 respectively, both of them at that time on the west bank of the Rio Grande.

Grants were made in the Taos Valley, the mountain valleys beneath the Sangre de Cristo range and the Lower Chama. Some grants encroached on Taos, San Juan and other Pueblos. Grants in later years were made in more outlying areas which were very subject to raids by nomadic Indians. The Comanches moved south onto the plains of eastern New Mexico and northern Texas early in the 18th century. Although they maintained friendly relations with such pueblos as Taos where an annual trade fair was conducted under the auspices of the colonial government, they raided others. They also raided most Hispanic settlements, primarily for horses and captives. The Kiowas who lived northeast of the Jicarilla Apaches also began to raid. Although they were the linguistic relatives of the Rio Grande Pueblos, they maintained no relationships of friendship and trade. Utes and Navajos also raided the settlements from time to time.

The result of these forays was that the colonists of the outlying settlements often fled to the homes of their relatives in La Cañada, while Taos Valley settlers moved into the Pueblo and lived there for years at a time.

Despite the fear of nomadic raids, however, the 18th century land grants were settled. Homes were built, crops were planted, irrigation ditches were built and maintained, small chapels were erected and livestock were grazed. The range of settlement in the 18th century had a smaller total extension than in the 17th, but as population began to grow there was a more continuous use of land.

The settlement pattern of the 18th century settlers was largely one of scattered extended-family farms. In some instances, particularly at the insistence of the colonial authorities, a closed plaza would be formed, with all the houses built adjacent around the square to provide a continuous outer wall (for instance, as seen in the Plaza del Cerro of Chimayó). As population grew, however, it tended to scatter, and even in cases of defensive building the settlers found that they were not safe against raids by the nomadic Indians.

In 1760 Pablo Villalpando owned the largest house in the Taos Valley, with defensive towers and a parapet. All the settlers took refuge in the house when forewarned of a Comanche raid, and the women fought off the attackers by the side of their men. The Comanches, however, opened breaches in the wall and set fire to the house; after killing numerous settlers, they carried off 64 settlers of both sexes and all ages into captivity.

Since even strongly fortified homes and plazas could be stormed, it is not surprising that the 18th century settlers flouted the regulations on the formation of settlements. Even the three villas did not conform to the regulations. In 1776 Santa Fe had a total population of 2014 persons, of whom only 1167 lived more or less close to the plaza. Santa Cruz had a population of 1389, of whom only 680 lived close to the plaza. Albuquerque had a population of 2416 persons scattered from Corrales to Tomé, with only 763 persons living close to the plaza. At that time, the total population of the province was 18,261 and the authorities were constantly exhorting the settlers to set up concentrated communities like the Pueblos.

Not only did settlers find that fortified enclosed plazas provided inadequate protection, they also had reasons of their own in the outlying communities for avoiding close neighbors. Many were engaged in contraband trade with the nomadic Indians and wanted no supervision over their trading. Strenuous efforts by Governor Juan Bautista de Anza in 1778-80 succeeded in concentrating many but not all communities.

The majority of the colonial settlers lived in communities whose population ranged from 30 to less than 500. Except for the villas, there was relative closeness between neighbors only in the Española Valley. By the early 19th century there were permanent settlements as far south as Socorro and as far north as Arroyo Hondo, as far east as the Mora Valley and as far west as the Navajo frontier along the Rio Puerco. Even in the face of opposition from the Mimbreños Apaches of southwestern New Mexico, a copper mining enterprise was opened on the fabled Santa Rita Grant near present Silver City.

During the course of the 18th century, the settlers came to be more numerous than their Pueblo neighbors, although the rate of population growth was slow until the final decades of the century. Periodic epidemics and occasional famine years continued to decimate the Pueblo population even more severely than the settlers. A gradual process of hispanization was taking place, furthermore, which caused the Pueblo leadership to expel acculturated members in order to maintain the integrity of Pueblo culture and its need for privacy in the observance of traditional beliefs. The children of Tewa women who married settlers were usually not accepted into the religious organizations of the pueblo.

Although the Hispanic system of land ownership and managment continued to be perceptibly different from that of the Pueblos, the interchange of technology and ideas pertaining to land use which had commenced in the 17th century continued. The 18th century settlers, as indicated in many wills, suffered a perennial shortage of implements. Like the Pueblos, they used coas, (digging sticks) to plant corn. Although the colonial authorities issued metal tools to settlers, these were in chronically short supply. They had few metal-tipped hoes, metal digging sticks and metal shovels. In outlying areas wooden spades continued in use into the middle of the 19th century.

The settlers raised more grain crops than did the Pueblos for home consumption, wheat, barley and oats in addition to corn. There was apparently no sugar cane raised in New Mexico in 1776 when Father Dominguez wrote his report and mentioned the high cost of importing sugar, but the wooden cane presses still in existence in northern New Mexico villages are of an ancient design and must have been in use by the early 19th century.

Like the Pueblos, the settlers traded off surplus crops to the nomadic tribes, especially corn and semi-domesticated tobacco called punche which they raised and sold in defiance of the excise tax on tobacco.

Unlike the Pueblos, the settlers had individual family-owned allotments of residential and farming land which they could and sometimes did sell after a certain period of residence, usually at least four years. Over the generations the farmland was subdivided, among heirs of both sexes, in strips running at right angles to the irrigation ditch. With each subdivision the strips would become narrower. In colonial times the settlers sometimes deferred subdividing and worked the land in groups larger than the nuclear family unit. The Pueblos, on the other hand, gave out agricultural plots in usufruct to extended family groups, but the lands remained inalienable to the pueblo. Agricultural plots were assigned. Aerial views of most pueblo lands today contrast sharply with those of a Hispanic community.

Certain plant foods raised or gathered by the settlers of New Mexico were popular items at the Chihuahua trade fairs in late colonial times. Strings of chile and sacks of piñon nuts were carried to the fairs, as well as animal products: sheep on the hoof, sheep pelts, wool and homespun cloth; buffalo hides and dried buffalo meat; deerskins and elk hide dressed to a soft chamois.

Raising livestock and hunting wild game were important activities of the settlers. Sheep were the most universal unit of exchange in an economy where cash was in short supply; therefore sheep were reckoned as wealth. Cattle were raised in smaller numbers than sheep in colonial New Mexico, and were owned largely by a small number of more affluent families. Goats were important as meat and dairy animals. Groups of hunters travelled out on the plains each year to kill buffalo, dry the meat and bones and dress the hides, and to engage in sporadic trade with the buffalo-hunting nomadic Indians.

The extensive activity of men and boys in herding, buffalo hunting, going on trading journeys to faraway towns in New Spain and to the camps of nomadic Indians left a great deal of work in the home communities largely in the hands of women, children and the elderly persons. Raising and harvesting crops, caring for and milking dairy animals, chopping firewood, repairing homes, spinning and weaving woolen cloth were often carried on when there were few if any able bodied men on hand. Among the settlers there was more labor interchange between the sexes than among the Pueblos; Pueblo men were the weavers and principal farmers while Pueblo women were the potters and home maintenance experts.

The settlers were perennially shorthanded, because of the labor needs of their farflung activities. Their principal source of additional "hands", other than their own children, were the captives they took among the nomadic Indians. Adult male captives were not valued, because they could escape easily. Young women and, particularly, children, were the captives most often held by the settlers and raised in their homes. When raiding the settlements, the nomadic Indians also preferred to take their captives among the women and children.

In his 1776 report, Fray Francisco Atanasio Dominguez described a substantial and clearcut servant class only in Santa Fe, the capital of New Mexico. The class status of other communities was variously described by him as "some are masters, others servants, others serve in both capacities" or even, "almost all are their own masters and servants". There were affluent settlers, but not the very rich and pampered elite to be found in other colonies of the 18th century colonial powers.

In the latter half of the 18th century and early years of the 19th, grant lands were given in increasingly large blocks, usually to groups of families who promised to found settlements. Generally one or several principal settlers received a double allotment of agricultural land. As the land along the Rio Grande and its main tributaries was completely taken up, grants were requested in more outlying areas. The more outlying grants established a buffer population at critical points of entry for nomadic raiders seeking to strike at the core population in the main valleys.

At times the settlers in the more marginal areas found their buffer function so taxing that they sought to abandon their settlements. It was the firm position of the authorities, however, that acceptance of a grant of land carried with it the responsibility to remain on it. The Cebolleta settlers, for instance received their grant in 1800 and, after a year of attacks by Navajos who considered the land within their range, deserted and moved to Chihuahua. They were brought back under military escort, on pain of death if they again deserted.

The early 19th century saw increased hostilities between settlers and nomads because new land grants were encroaching upon hunting or gathering areas used by various tribes. The miners at Santa Rita del Cobre were attacked by the Mimbreños Apaches, the Navajos swept in on all settlements along the Middle and Lower Rio Grande and, along the margin of the buffalo plains, any grants that were not limited to grazing lands were attacked. The buffalo-hunting Indians had less objection to the herding of animals on the plains than to the building of permanent houses, the digging of ditches and the fencing off of arable lands.

NEW MEXICO ON THE EVE OF CONQUEST BY THE UNITED STATES

The victory of Mexico's struggle for independence from the Spanish Empire in 1821 placed a new government in charge of a vast nation which included New Mexico as one of its northern frontier territories. The Republic of Mexico did not greatly change laws relating to lands and land grants, except that Iturbide's Colonization Law of 1823, which facilitated the acquisition of huge empresario (investment) grants, was modified in 1824 to limit the extent of any individual grant to 11 square leagues. Further regulations were intended to control the considerable colonization of northern borderlands that the Republic sought, and to guard against impositions, frauds and acts prejudicial to the public or to the rights of third persons.

The Constitution of Mexico granted citizenship status to settled, Christian Indians, extending to them the right to own land in severalty in their communities and to sell these lands at will. These new regulations remained a dead letter with the pueblos except for lands purchased or sold by the pueblo as a whole.

Immediately preceding and following the creation of the Mexican Republic, a number of petitions were made for large acreages of grazing lands in and east of the Pecos Valley. Juan Estevan Pino, Pedro Jose Perea, Antonio Sandoval and Antonio Ortiz apparently grazed their livestock on these lands for years until the early 1840's when hostilities broke out anew with the Indians.

The nomads on the western plains were being pressed from the east by tribes displaced in the westward expansion of the United States. By this time the United States was becoming a source of worry to the Mexican government and to many people in New Mexico.

Even since the Louisiana Purchase of 1803 and Captain Zebulon Pike's expedition of 1806-7 which took him by chance or by design to New Mexico's northern rim, Spanish colonial authorities had made sporadic and not altogether successful efforts to keep trappers, traders and political agents of the United States out of New Mexico. The Mexican Republic had reversed this policy, welcoming the opening of trade between New Mexico and the United States.

Within a few short years traders were bringing their goods from Independence, Missouri to Santa Fe and from there followed the Royal Highway to Chihuahua. A small group of New Mexicans became associated with them and soon formed a class of ricos (rich men). They opened stores in a number of towns in partnership with the United States traders. Purchasers of their goods often had no cash and paid off their store debts with livestock and land. Some of the New Mexico ricos belonged to families that had been affluent prior to the opening of the Santa Fe Trail but others had risen from poverty according to folksay.

Some of the traders from the United States and Canada married New Mexican wives and settled down in Santa Fe and Taos. To further their business dealings they became interested in acquiring land. After the Texas War of 1836, they were further motivated by the expectation

that New Mexico would soon be incorporated into the rapidly expanding United States.

The Americans and their New Mexican associates formed a political faction known as the "American Party". Their leader was Charles Bent, who had married a Taos bride and had settled in Taos in order to further the business interests he shared with his brother William. The Bents had built a trading fort on the north bank of the Arkansas River, near present-day La Junta, Colorado. From this strategic location at the border between New Mexico and the United States, the Bent brothers built alliances with certain Indian tribes, providing them with arms which were sometimes used against New Mexico.

The Bents were closely associated with Céran St. Vrain and Carlos Beaubien, who had become Mexican citizens. In collaboration with Governor Manuel Armijo and his secretary Guadalupe Miranda, and with the prefect of Taos, Cornelio Vigil, Charles Bent and several other United States citizens became silent partners in land grants of enormous size, the largest being the Maxwell Grant, eventually confirmed at 1,714,764 acres. This was a far from legal transaction, since the Mexican laws then in effect could not have given these individuals jointly more than 97,000 acres. It appears, furthermore, that the Mexican government would have finally rejected the Maxwell petition had it not been that United States conquest intervened before it was possible to weigh the legality of the grant. Nonetheless, with the help of Governor Armijo, Preston Beck, Jr. managed to purchase in 1844 the former grazing allotment of Juan Estevan Pino, later confirmed at 318,699.72 acres. The Pinos had had to withdraw their livestock from the tract years before, due to the opposition of buffalo-hunting Indians to their presence and Beck was completely unable to settle on the tract, because of the same opposition. The Pino tract, in fact, may not have been transferable because of being a grant in usufruct; yet it was sold to Beck as a grant for settlement.

Manuel Armijo also made a grant to Joseph Sutton, a businessman, for 69,455 acres far out on the plains, that was to be used for the raising of sheep and the building of a textile mill. Sutton secured the unusual condition of being permitted to be placed in possession whenever he wished, rather than being obliged to settle immediately. This was convenient, since by no stretch of the imagination would the nomadic Indians have permitted a textile mill on their range. Sutton paid Armijo a goodly sum for this grant.

All the land grants at the northern and eastern margins of New Mexico, nearly 3 million acres granted by Manuel Armijo to his American and New Mexican partners in commerce, were of strategic importance in facilitating the entry of American troops into New Mexico in 1846. Armijo even granted lands to John Scolly and several associates at the confluence of the Mora and Sapello Rivers, encroaching upon both the Mora and the Las Vegas Grants and surrounding a tract given to James Boney ("Santiago Bone") by Governor Albino Perez in 1835. This was the site later selected for the construction of Fort Union.

Armijo's actions and the internal threat to New Mexico of the wealthy, influential and clearly hostile residents from the United States aroused the alarm of some New Mexico citizens. Father Antonio José Martinez of Taos, the leading opponent of the American Party, succeeded in having some grants revoked while Armijo was out of office; when Armijo returned to office, however, he regranted the lands.

Armijo was Governor of New Mexico in 1827-1829, 1837-1844 and 1845-1846. He was in office when the troops of General Stephen Watts Kearny invaded New Mexico from their advance base at Bent's Fort. Armijo at the last moment withdrew the few cannon of the defending forces and ordered the defenders to disband, providing Kearny with an easy victory.

NEW MEXICO AS A UNITED STATES TERRITORY (1846 - 1912)

The conquest of New Mexico was the product of a process of United States expansion which commenced early in the 19th century with the Louisiana Purchase and the Lewis and Clark expedition. This expansion occurred in an atmosphere of evangelistic zeal expressed in the Doctrine of Manifest Destiny, but business concerns were never far removed from the center of action. The Texas Uprising of 1836 made it clear that New Mexico and California could not be held much longer by the fledgling Mexican Republic. The conquest of New Mexico by the United States was engineered and facilitated by mercantile interests, a handful of New Mexico ricos in collaboration with the traders from Missiouri. There is a curious parallel between the fact that de Vargas managed to reoccupy New Mexico by promising to respect certain rights of the Pueblos and the fact that Kearny managed to take Santa Fe by promisng the Hispanic settlers protection from the raids of nomadic Indians and full recognition of their personal and property rights.

The Treaty of Guadalupe Hidalgo, signed by the United States and Mexico in 1848, appeared to guarantee the rights of New Mexicans to their lands. Article VIII stated, with regard to New Mexico and California, that "in the said Territories, property of every kind now belonging to Mexicans established there, shall be inviolably respected. The present owners, the heirs of these, and all Mexicans who shall hereafter acquire said property by contract, shall enjoy with respect to it guaranties equally ample as if the same belonged to citizens of the United States".

Article IX of the Treaty stated that the former Mexican citizens of the ceded territories, both Hispanic and Indian, "shall be incorporated into the Union of the United States, and admitted as soon as possible, according to the principles of the federal constitution, to the enjoyment of all the rights of citizens of the United States. In the meantime they shall be maintained and protected in the enjoyment of their liberty, their property and the civil rights now vested in them, according to the Mexican laws".

These were fine words, but as soon as a Surveyor General was sent to New Mexico, in 1854, to supervise the processing of land grant claims, the mercantile interests which had already gained control over large tracts of land were reinforced by swarms of land speculators from the eastern United States and, eventually, several European countries.

The Surveyor General was instructed by Congress to consider proof of the physical existence of any community in New Mexico by or before 1846 as prima facie evidence that a land grant existed. In practice, however, many well-established communities, even Santa Fe, were passed over in the confirmations, while the Armijo grantees and other land speculators asked for and got early attention. Several of the Surveyors General between 1854 and 1888 were themselves partners in speculative enterprises involving land grants.

Occupation and confirmation of a number of authentic grants were interrupted by the continued campaigns against nomadic Indians. What had amounted to frequent retaliatory raids under the Mexican government became full-fledged military operations under the Unted States, for the purpose of ending the nomadic way of life and forcing all Indians to settle on reservations.

Some 8,000 Navajos and 1,000 Mescalero Apaches were held in military detention near Fort Sumner from 1864 to 1868. Later the Navajos were permitted to return under military control to a portion of their former range. A network of forts was built in southern New Mexico to harass the Mescalero and Chiricahua Apaches and force them to capitulate. Many Mescaleros were held as prisoners of war, first in Florida, then Alabama, then at Fort Sill, Oklahoma, before being permitted in 1913 to return to a reservation within their mountain territory.

The Jicarilla Apaches, who had offered no vestige of resistance since 1854, were removed from their territory on what become the Maxwell Grant and were assigned to an agency at Tierra Amarilla in 1874. Soon, however, they were ordered to move south, and despite their objections, were actually held at Fort Stanton from 1883 to 1887. Then they were shipped to their present reservation on the Rio Navajo northwest of Tierra Amarilla, after several Hispanic families had taken out homesteads on part of the land.

The Comanches and Kiowas were forced out of New Mexico and onto reservations in the "Indian Territory" of Oklahoma. The Utes were driven onto reservations in Colorado and Utah and a small strip in northwestern New Mexico. Their reservations were drastically reduced by the terms of the Brunot Agreement in 1874. Ironically, among the troops used to round up nomadic Indians at the end of the Civil War were Black soldiers recently emancipated from slavery. New Mexico Hispanos provided militia service in these campaigns and, as a part of the process whereby conquered peoples helped to conquer others, Ute scouts participated in the campaign against the Navajos while Navajo scouts fought in the final campaigns against the Apaches.

During the years of Indian fighting, a new population element entered New Mexico, taking over first the Mescalero winter territory in the Lower Pecos Valley and soon moving northward to occupy some of the rangelands on Hispanic grants. These were wealthy Texas cattlemen, led by John Chisum. They made cattle drives through eastern New Mexico to load their cattle onto trains in Kansas until the early 1880's, when the Atchison, Topeka and Santa Fe Railroad was built across New Mexico to the West Coast and southward to El Paso, Texas. In the same period a narrow gauge line was built by the Denver, Rio Grande and Western Company from Colorado Springs south-westward to northern New Mexico borderlands, and thence northwestward to Durango and Silverton, Colorado. A branch reached Santa Fe in 1887.

The building of the railroad lines made New Mexico much more accessible to the Texas cattle barons and much more valuable to the speculators.

The combined impact of the cattle barons and land speculators was fateful with regard to social and land relationships in New Mexico.

In the first place, the Texas cattlemen had their own brand of law, "West of the Pecos", which they imposed with the aid of Texas Rangers and vigilante tactics. Claiming that the Comanches were selling stolen cattle to the Hisponas, they destroyed the Comanchero trade. They had a strong anti-Mexican and anti-Indian bias, and took satisfaction in appropriating and fencing off the sheep range of Hispanic stockmen in Lincoln and San Miguel Counties.

The results of these incursions were twofold. In the first place the Indian population of eastern and southern New Mexico was completely eliminated, along with the traditional patterns of trade between nomadic Indians and Hispanos. In the second place, Hispanic subsistence pastoralism based on sheepraising was replaced in roughly the same area by commercial cattle raising. The latter land use was more intensive and more exploitative than had been the previous uses.

The days of the open range rapidly drew to a close. The land speculators and cattle barons fenced off the property they acquired, closing off access to Hispanic and Indian grazers. As the railroads were built, the lines crossed Hispanic land grants, Pueblo lands and Navajo and Apache lands. The railroad company always received a generous right-of-way, while the groups whose land was being appropriated received meager compensation.

Temporary prosperity came to communities whose menfolk obtained employment cutting ties and laying railroad line. In the long run, however, the New Mexico railroads stimulated an economy that was based primarily on the extraction of natural resources from the area: minerals, timber, meat, wool and the like. This was an economy which enriched small numbers of persons at the expense of many.

The story of the land grants is lengthy and involved. During the days of the Surveyors General, numerous quasi-legal tactics were successfully used to gain title away from authentic landowners. The Canadian Mountain Man, Antoine Leroux, married a Hispanic wife with shadowy claims to heirship of some lands in the Taos Valley. He then proceeded in her name to claim a much greater part of the Valley, including lands clearly belonging to the Pueblo. Leroux also acquired documents of the Mora Grant and then proceeded to claim that this grant included the lands of Picuris Pueblo. He proceeded to place squatters on Picuris lands in the Peñasco Valley and instigated an attempt to divert water from Picuris Pueblo's Rio Del Pueblo into the Mora Valley.

It became fashionable to purchase from one family of heirs the documents to an entire community grant, or to purchase the documents of heirs to long-abandoned grazing grants. In most cases of the latter practice, it seems clear that grazing grants were not intended for the establishment of communities and were more in the nature of permits in usufruct.

Other grants like the flagrantly illegal Maxwell Grant had never been approved by the Mexican government and never could have been. This grant as patented by Congress came to 1,714,764.94 acres, and was in the heart of traditional Jicarilla Apache country.

For most legitimate Hispanic heirs the complicated and expensive procedures for confirming grants, first by Congress under the recommendation of the Surveyor General and, from 1891 to 1904, through the Court of Private Land Claims, were extremely difficult. It is said that 1,000 claims were originally filed with the Surveyor General, but the record stops at less than half tham many.

Of the total approved and patented claims, 46 through the Surveyor General and 82 through the Court of Private Land Claims, more acreage was owned by land speculators and cattle ranchers in 1904 than by Hispanic heirs. At the same time, the Pueblo lands, while confirmed, were in many cases cut severely back from the actual holdings of the Indians. While the Spanish colonial and Mexican governments had never accorded respectful sanction to Indian religious use of lands, there had been no concerted effort to appropriate shrine areas. Before the Territorial period was over, however, many areas sacred to Pueblos had been incorporated into National Forest land.

The chief organization of bankers, lawyers and land speculators from the end of the Civil War to the end of the Territorial period was known as the "Santa Fe Ring". One of its principal leaders was Thomas Benton Catron, who came to own title or interest in 34 New Mexico grants. At one time he owned 3 million acres in New Mexico, including much of the Mora Grant and most of the Tierra Amarilla Grant. His chief purpose in obtaining land was to buy cheap and then sell off portions of the lands and their resources at a high profit.

Catron sold off the timber rights of the northern part of the Tierra Amarilla grant, which was transformed from ponderosa pine country to open grassland within a few years. The timber stands of other land grants were also clear cut, a practice which continues today in New Mexico forest lands.

Another area of resource exploitation in which Catorn was interested was mining land. He bought a number of grants thought to have good mineral resources. Others followed suit. The Santa Rita Mine was reopened and expanded. Gold and silver fever in New Mexico was short-lived, however. Copper remained the greatest mineral asset, with coal extraction far behind. Oil, uranium, zinc, potash and natural gas remained to be exploited in the post-Territorial period.

Toward the end of the Territorial period the merchants, lawyers and bankers who dominated New Mexico adopted the ancient system of partido agreements (shareherding) to a system which guaranteed them payment in sheep of any indebtedness incurred by Hispanic villagers. Sheep-raising had been increasingly profitable since the rise of the demand for wool in Civil War times. The wool clip had risen from 493,000

pounds in 1860 to 4 million pounds in 1880. By the 1890's large areas of New Mexico, especially in the Lower and Upper Sonoran life zones, were badly overgrazed and subject to erosion.

Some Hispanic sheepmen had participated in the expansion of the sheep industry and its commercialization. The majority of them fell prey to the new system of partido contract when their debts were called.

By the early 20th century, the landholdings of both the Pueblos and the Hispanic villagers were vastly reduced and a new system of commercial ranching had taken over. The use of windmills to raise undergound water to the surface made it possible to settle areas that had never before known a fixed population.

The Navajos on their reservation in northwestern New Mexico had received sheep from the government following their detention at the Bosque Redondo. The growth of human population and herds was beginning to strain the resources of their reservation. The Jicarillas and Mescaleros in the same period were in deep poverty because they had not had time to adjust to the restrictions of their new life, and had no means to develop a new resource base.

NEW MEXICO IN THE TWENTIETH CENTURY

Before the twentieth centruy was well underway Hispanos had lost the majority of their traditional range and agricultural lands to taxation, and land development corporations. For the first time many Hispanos were forced seasonally or permanently to leave their native villages and become low-paid wage workers in other states. They worked the sugar beet fields in Colorado, fruit orchards and cotton fields in Arizona, and mines in Utah and Colorado. Others became sheep herders for Anglo-American absentee livestock owners. The few who remained on their small farms were burdened with taxation and the transition of the economy from barter to cash. Taxes imposed a staggering burden on heirs to community land grants, who had never previously had to pay any direct tax on land. Cities like Denver, Salt Lake City and Los Angeles increased their population by the number of rural farmers/ranchers from New Mexico forced to leave to earn the money to pay the taxes on their land or, if they had lost their land, to support their families.

With increasing industrialization of livestock and lumber enterprises, more of the Indian and Hispanic lands were lost. Many grants became incorporated into national forests, after single or corporate purchasers bought title papers for a song, extracted all the marketable timber, and then made a double profit through the sale of first the timber,and then the deforested grant to the national forest. This is what happened on the Santa Barbara Grant in the Peñasco area, and others. With all the trees gone, reseeding had to be done at taxpayers' expense.

By the early twentieth century, some 12% of all the lands of New Mexico had been set aside as National Forests and Wilderness areas. In 1904 the Federal Government had control of more than 52 million acreas of New Mexico's 77.8 million acres. This was accomplished, in the first place, by massive displacement of nomadic Indians and, in the second place, by the appropriation of most Spanish/Mexican community grant lands into the Public Domain.

As an example, San Miguel del Vado's 315,300 acres were reduced to the 5,024.30 acres occupied by plazas, farmhouses and irrigated lands. The grant heirs in San Jose, Ribera, San Miguel, El Pueblo, Sena, Lovato, Villanueva, El Cerrito and other hamlets on the grant were left with no place to graze their livestock. The "surplus" lands were then thrown open under the Homestead Law. The federal government still controls more than 34% of New Mexico lands.

Large tracts of land were set aside as New Mexico won statehood in 1912, for the production of income to support schools. In many cases, however, these lands have been used for the benefit of special interest groups. The case of state lands on the White Sands Missile Range which have been taken away from ranchers with grazing leases and will apparently be acquired permanently by the United States provides an example in 1975.

Ever since the establishment of a school system in New Mexico, Anglo American teachers have been imposing the English language on children regardless of their ability to understand it. A decree of 1593 by the Spanish monarchs proclaimed absolute equality of the offspring of Spaniards, Indians and Mestizos. In New Mexico this decree was better fulfilled under the Spanish colonial and Mexican governments than elsewhere in Latin America. In the Land of the Free, however, denial of the right to speak one's home language in school is still contributing to a severe dropout problem. Recently, bi-lingual programs have been set up to help non-English speaking children better to understand their school lessons and learn about their cultural heritage.

As the government appropriated rangelands from Indian and Hispanic users, fences were built to keep out people and livestock except under paid lease. Numerous rural communities reckon the onset of their current poverty from the date the local range was fenced off. There is a saying: "Los cercos de alambre son cercos de hambre" (wire fences are fences of hunger).

The grazing lands in the National Forests and other government-owned tracts have been primarily issued to corporate out of state cattle growers. Deprived of their traditional range, the Hispanos have been confined to small village dwellings with tiny garden plots in their "quaint" communities where they cannot produce enough to feed themselves or pasture their animals, at one time their main source of a rich protein diet. With all the community range lands fenced off, villagers are often forced to pasture their small herds along the roads, ditches and river bottoms. As the standard of living of the country as a whole has risen, that of the Hispanic New Mexican has proportionately declined.

If the poverty of rural Hispanos is to be ended, one solution would be to allow them to increase their herds and graze more cattle on the lands that were taken away from them. This would raise the standard of living and, in turn, improve the tax base. As an example, the Vallecitos de Lobato Grant is now mostly National Forest land with the exception of the small agricultural plots along the stream which are privately owned. The common lands, where big herds once grazed are now fenced and allotted by grazing permits, of which few are leased to Vallecitos residents.

The exploitative extraction of New Mexico's natural resources continues. Mineral extraction comprises several large and environmentally destructive industries in New Mexico. Today the entire area surrounding the Santa Rita Copper mine holds one of the greatest known reserves of copper in the world. Huge open pit mines have replaced the modest homesteads of miners rooted in the area since the mid-19th century.

Carlsbad is a major potash center. Southeastern New Mexico also produces petroleum, with a major refinery at Hobbs, although most New Mexico oil is refined out-of-state.

Northwestern New Mexico is a center for the extraction of natural gas, coal, and uranium. Giant power plants in the Farmington area provide electricity for the West Coast but create a pollution hazard for all of northwestern New Mexico. Strip mining of coal for the plant is destroying the ground cover in a wide area.

The forest lands of the Canadian and Hudsonian life zones in New Mexico are centers of timber cutting and livestock grazing, often by out-of-state corporate concerns and often with resulting damage to the environment.

Huge dams on most of New Mexico's rivers have served the needs of agribusiness in southern New Mexico and Texas, and have enriched the corporate contractors who build them. Each reservoir is a monument to the displacement of whole communities. Reservoirs and National Forests serve a growing recreation industry. Ironically, poverty in New Mexico is second only to Mississippi, so that the people living closest to the recreation areas can least afford to use them.

New Mexico's latest industry is real estate subdevelopment, which profits from the state's weak laws regulating exploitation of land. The major purpose of some enterprises is to advertise the "Land of Enchantment" in big city newspapers all over the country and induce people to buy lots, sight unseen, on the installment plan. Huge tracts with insufficient water for residential purposes have had "streets" bulldozed over their surface, accelerating soil erosion.

New Mexico's oldest population, the Pueblo Indians, now number some 25,000 and own somewhat more than half a million acres of land; some of it is excellent agricultural land, but such pueblos as Zia cannot live from their land, even in part. Some 50,000 Navajos, who at one time roamed freely on an estimated 23 million acreas of land in New Mexico, now own only 3 million acres, many of them severely overgrazed, damaged by mining and inadequate for the rapidly growing population.

In 1933 erosion had reached a critical state on the Navajo reservation, due to the increase in Navajo sheep herds and the reservation's inability to feed the stock and at the same time maintain its plant cover. The government, in the interest of long-range conservation, initiated a livestock reduction program which drastically reduced the Navajos' holdings of sheep, goats and horses. The Navajos opposed the program because they felt that a vital part of their way of life was being taken from them. The government did not take into account the human problems of land use and the attachment which the Navajo had for thier sheep and horses.

The livestock reduction program caused many Navajos to leave the reservation in search of jobs as fruit pickers, mine workers, and railroad workers. Many joined the armed forces. Of the present Navajo population 46.0% are employed on the reservation on various payrolls (government,

tribal, mining, construction, crafts, etc.); 37.8% are employed outside the reservation (railroad workers, agricultural, etc.);and 16.2% receive forms of compensation (Social Security, welfare, Railroad compensation, etc.). Salaries for non-college educated Navajos is still very low.

Some 1,500 Jicarilla Apaches own approximately 772,000 acres, good for timber and grazing. The Mescaleros, with an enrollment of 1,463, own less than half a million acreas of timber and grazing land, with little potential farmland.

Congress confirmed more than 8 1/2 million acreas of supposed Spanish and Mexican grant lands, while the Court of Private Land Claims confirmed nearly another two million. Ironically, the beneficiaries of these confirmed lands were in the majority of cases not the authentic Hispanic heirs of authentic grants. In some cases, notably the Tierra Amarilla Grant, the patent was made out only to one grantee or heir of a community grant, who then sold it immediately to a speculator, Years of subsequent loss by tax sales, fraud and misappropriation have left nearly 3000,000 Hispanic people in New Mexico with considerably less than a million acres. From an overwhelmingly rural population in the 1930's, the majority of New Mexico's Hispanic population has recently become urban, with a high rate of poverty.

New Mexico's traditional cultural groups have lived a long time upon this land, have developed many skills in surviving upon it and have incorporated their love for it into their religious practice and daily life. They never wi'fully misused it, although from time to time they overused certain areas. Many still prefer to live in adobe houses built by their own hands: "casas de la tierra" (houses made of earth).

Within a single century, enormous changes have taken place on the lands of New Mexico, in most of the 6 life zones. New Mexico is now at a crossroads: will "Progress" destroy the land, the very basis of life?

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KEY TO LAND GRANTS LISTED

P = Pueblo

I = Individual

C = Community

I-C = Originally Individual, Later Community

G = Grazing

T = Town

NEW MEXICO LAND GRANT CLAIMS

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
RIO ARRIBA COUNTY						
1.	C	1836	Petaca	1,392.10	185,584.90	Government
2.	C	1824	Vallecito de Lobato		114,400.54	Government
3.	C	1832	Tierra Amarilla	594,515.55		Non Heirs-Heirs (Small Plots)
4.	C	1806	Cañón de Chama	1,422.62	472,736.95	Government and Non Heirs
5.	C	1807	Rancho de Coyote	(same as #4)	434,000	Government
6.	C	1805	Juan Bautista Valdez	1,468.57	58,531.43	Heirs
7.	I	1766	Piedra Lumbre-Pedro Martín Serrano	49,747.89		Most sold by heirs
8.	G	1766	Polvadera-Juan Pablo Martin	35,761.14		Government
9.	C	1735	Barranca	25,000		Government
10.	I	1724	Juan José Lobato	205,615.72		Government
11.	I-C	1724	Mestas: la Cuchilla		11,500	Non Heirs
12.	C	1754	Abiquiú	16,547.20		Heirs
13.	G	1807	Vallecito de San Antonio		38,000	Government
14.	I-C	1739	Plaza Colorada-Valdez	7,577.92	11,622.08	Non Heirs
15.	C	1735	Manuela García de las Ribas, et. al.		7.577.92	Government
16.	I	1739	Plaza Blanca-Manuel Bustos	8,955.11	7,044.89	Non Heirs
17.	I-C	1734	Bartolomé Trujillo		2,000	Government
18.	I	1735	José Antonio Torres		5,000	Government
19.	I-C	1735	Juan Esteban García de Noriega (El Rito)		5,000	Government
20.	I	1735	Antonio de Ulibarrí		1,000	Government
21.	I-C	1780	El Rito (See #19)		50,000	Government

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
22.	C	1840	Río del Oso		5,000	Government
23.	C	1720's	Roque Jacinto Jaramillo, et. al. (See #22)		10,000	Government
24.	I-C	1714	Antonio de Salazar		23,351.12	Government
25.	I-G	1724	Juan Tafoya		86,000	Santa Clara Pueblo
26.	P		Pueblo of San Juan	17,544.77	(Pueblo Lands	now total 12,234 acres)
27.	I-C	1724	Chamita	1,636.29		Heirs
28.	I	1714	Cristóbal Crespín		3,000	Heirs of B. Sanchez
29.	I-C	1710	Juan de Ulibarrí		500	Heirs of B. Sanchez
30.	I-C	1707	Bartolomé Sánchez	4,469.828	5,530.172	Heirs
31.	C	1743	Black Mesa	19,171.35	5,828.65	Non Heirs
32.	I	1704	Antonio de Abeytia	721.42	7,278.58	Heirs - Non Heirs
33.	I-C	1768	José Ignacio Alarí Gabriel Quintana		1,000	Government
34.	C	1790	Ojo Caliente	2,244.98	37,755.02	Heirs - Non Heirs
35.	I	1810	La Naza-Manuel Lucero		2,000	Government
36.	C	1725	Embudo		25,000	Government
37.	I-C	1703	Sebastian Martín	51,387.20		Heirs - Government
38.	I	1754	Francisco Montes Vigil	8,253.74	26,746.26	Government
39.	C	1754	Nuestra Señora de Rosario Fernando y Santiago (Truchas)	14,786.58	5,213.42	Heirs
	SANTA FE COUNTY					
40.	I-C	1822	Domingo Fernández	81,632.67		Non Heirs
41.	C	1843	The Mesita Blanca		18,000	Government
42.	C	1843	The Tacubaya		3,000	Government
43.	C	1846	Cadillal			Domingo Fernandez Heirs
44.	C	1814	Galisteo	260.79	21,739.21	Heirs

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
45.	I-C	1799	Ojito del Galisteo		25,000	Government
46.	C	1807-1820	Rancho de Nuestra Señora de la Luz	16,546.85		Catholic Church
47.	I-C	1785	Cañada de los Alamos	12,068.39	1,637.61	Government
48.	I	1710	Sebastián de Vargas	13,434.38	28,565.62	Heirs have about 6,500 acres
49.	I	1728	José de Leyba		18,000	Government
50.	T	1609	Santa Fé		17,000	Non Heirs-Heirs
51.	I	1742	Cañada Ancha	200.82	23,460.18	Heirs
52.	I	1732	José Antonio Lucero		700	Non Heirs
53.	I	1731	Talaya Hill	319.20	922.52	Non Heirs
54.	I	1742	Chamisos Arroyo		637	Non Heirs
55.	I	1742	Juan Cayetano Lobato		1,000	Non Heirs
56.	I	1742	Antonio Domínguez		800	Non Heirs
57.	I	1732	Luis de Armenta		623	Non Heirs
58.	I	1732	Manuel Tenorio		600	Non Heirs
59.	I	1743	José Durán		425.85	Non Heirs
60.	I	1743	Juan José Antonio Flores		1,500	Non Heirs
61.	I	1742	Juan Felipe Rodríguez		2,000	Non Heirs
62.	I	1742	The Archuleta & Gonzales		1,000	Non Heirs
63.	I	1769	Antonio Armijo		900	Non Heirs
64.	I	1769	Alamo		2,000	Non Heirs
65.	I	1742	Diego Arias de Quirós		2,000	Non Heirs
66.	I	1742	Juan José Archuleta		500	Non Heirs
67.	I	1746	Jose Rómulo de Vera		300	Non Heirs
68.	I	1742	Catarina Maese		300	Non Heirs
69.	I	1742	Domingo Valdez		500	Non Heirs
70.	I	1739	Alphonso Rael de Aguilar		345	Non Heirs

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
71.	I	1742	Tomas Tapia		500	Non Heirs
72.	I	1742	Felipe Tafoya		500	Non Heirs
73.	I	1742	Felipe Pacheco		500	Non Heirs
74.	I	1785	Roque Lovato		1,619.85	Non Heirs
75.	I	1790	Maes & Gallegos	1,000		Heirs and convent in Agua Fria.
76.	I	1700	El Pino		1,200	Non Heirs
77.	I	1769	Pacheco	581.29		Heirs
78.	I	1693	Francisco de Anaya Alamazán	3,020.79	42,000	Heirs
79.	I-C	1714	Hacienda del Alamo		50,000	Government
80.	P	1750	San Marcos Pueblo	1,895.44		Non Heirs
81.	C	1840	Alamitos Grant	297.55	138.86	Heirs
82.	C	1835	El Badito		1,350	Government
83.	I-C	1830	Gotera		1,800	Government
84.	I-C	1825	Maragua		389.82	Government
85.	C	1839	Cañada de San Francisco		2,000	Government
86.	C	1820	San Pedro	31,594.76		Non Heirs
87.	I	1844	Cañon del Agua	341.04	3,160.17	Non Heirs
88.	I	1846	Nuestra Señora de los Dolores Mine		42	Non Heirs
89.	I	1833	Ortiz Mine	69,199.33	259	Non Heirs
90.	C	1830	Real de Dolores del Oro		17,361	Non Heirs
91.	I-G	1727	Lo de Basquez		76,000	Government
92.	I	1782	Mesita de Juana López	42,022.25		Non Heirs
93.	I	1762	Sitio de Juana López	1,108.61		Non Heirs
94	I	1788	Sitio de los Serrillos	572.4		Non Heirs
95.	I-C		Los Serrillos	1473.81	808.66	Non Heirs - Heirs
	I-C	1695	La Majado	54,404.10		Non Heirs
	I	1742	Caja del Río	68,070.36		Non Heirs

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
98.	C	1702	Jacona	6,952.84		Non Heirs
99.	P		Pueblo of San Ildefonso	17,292.64	(Pueblo lands now total 26,192 acres)	
100.	P		Pueblo of Santa Clara	17,368.52	(Pueblo lands now total 45, 742 acres)	
101.	I-G	1742	Cañada de Santa Clara	490.62	1,372.78	Pueblo of Santa Clara
102.	T	1695	Santa Cruz	4,567.60	60,000	Heirs
103.	I	1700	José Trujillo - La Mesilla and Arroyo Seco		5,999.69	Government
104.	P		Pueblo of Pojoaque	13,520.38	(Pueblo lands now total 11,599 acres)	
105.	I	1699	Juan de Mestas		3,000	Pueblo of Pojoaque
106.	I	1699	Alfonso Rael de Aguilar		36	Pueblo of Pojoaque
107.	I-C	1731	Cuyamungué	604.27		Non Heirs
108.	P		Pueblo of Nambé	13,590	(Pueblo lands now total 19,113 acres)	
109.	I	1739	Gaspar Ortiz	57.18		Non Heirs
110.	C	1721?	Pueblo of Quemado (Cordova)		288,000	Government
111.	C	1743	Santo Domingo de Cundiyó	2,137.08		Heirs
112.	I	1846	Sierra Mosca		150,200	Government
113.	I	1725	Diego de Belasco		?	Government
114.	P		Pueblo of Tesuque	17,471.12	(Pueblo lands now total 17,027 acres)	
115.	I-C	1745	Río Tesuque		7,300	Government
116.	I	1752	Juan de Gabaldón	10,690.05		Non Heirs
117.	I	1744	Santiago Ramírez	272.168	5,893.88	Non Heirs
118.	I	1707	Santa Fe Cañón José Manuel Giltomé	6,000	6,000	Government
	TAOS COUNTY					
119.	I-C	1843	Sangre de Cristo-Lee and Beaubien	998,780.46		Non Heirs - Heirs
120.	I-G	1821	Paraje del Punche		90,000	Government

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
121.	C	1851	Plaza de Guadalupe (Cerro)		39,852	Government
122.	C	1842	San Antonio del RíoColorado		18,955.22	Government and Corporations
123.	C	1845	Cebolla		17,159.57	Government
124.	C	1828	Cañada de los Mestaños		16,000	Government
125.	I-C	1815	San Cristobal Severino and Antonio José Martínez		5,000	Small Plots owned by heirs-Government
126.	G	1836	Cañón del Río Colorado		43,939	Government
127.	C	1815	Arroyo Hondo	20,000.38	8,673.84	Heirs
128.	I-C	1742	Antoine Leroux (Pedro Vigil de Santillán, et al.)	56,428.31		Non Heirs and Taos Pueblo
129.	I	1716	Antonio Martínez	61,605.46		Heirs & Taos Pueblo
130.	I	1702	José Domínguez	Void-covered by Antonio Martínez		
131.	P		Pueblo of Taos	17,360.55	(Pueblo lands now total 95,341 acres)	
132.	C	1796	Fernando de Taos	1,817.24	71.76	Plots of land owned by heirs
133.	C	1712	Antonia de Gijosa	16,240.64	3,759.36	Heirs
134.	I-C	1710	Cristobal de la Serna (Ranchos de Taos)	22,232.57	7,767.43	Heirs
135.	C	1795	Rancho del Río Grande	91,813.15	17,229.85	Government
136.	C	1832	Río del Picurís		20,000	Government
137.	I	1793	Salvador Lobato		2,500	Government
138.	P		Pueblo of Picurís	17,460.69	(Pueblo Lands now total 14,960.47 acres plus 2,507.68 acres in private claims).	
139.	C	1751	Las Trampas	28,131.67		Government
140.	C	1795	Cieneguilla	43,961.54		Government
141.	I-G	1826	Orejas del Llano de los Aquajes	Forgery	150,000	Government
142.	C	1790	Santa Bárbara	30,638.28		Government
143.	I	1742	Ramon Vigil	31,209.52		Non Heirs - Government

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
144.	I	1742	Rito de los Frijoles		23,022.28	Government
	SANDOVAL COUNTY					
145.	I	1728	Cañada de Cochití	19,112.78		Non Heirs - Pueblo of Cochití
146.	P		Pueblo of Cochití	24,256.50	Pueblo lands now total 28,157)	
147.	I	1744	Juan José Moreno	Within Caja del Río	35,000	Non Heirs
148.	P-G		Pueblo of Cochití Pasture		20,000	Government
149.	I-C	1754	Juan Montes Vigil (Peña Blanca)	379.36		Heirs
150.	P		Pueblo of Santo Domingo	74,743.11	(Pueblo lands now total 69,262 acres)	
151.	P		Pueblo of San Felipe	34,766.86	(Pueblo lands now total 48,930 acres)	
152.	P		Santo Domingo & San Felipe	356		Pueblo Heirs
153.	I	1761	Santa Rosa de Cubero	1,945.496		San Felipe Pueblo
154.	I	1825	Las Lomitas		120,000	Government
155.	I	1745	Angustura	1295.30		Heirs - Non Heirs
156.	P	1709	El Ranchito	4,250.63.		Santa Ana Pueblo
157.	I-C	1701	Bernalillo Grant	3,404.67		Heirs
158.	C	1765	San Antonio de las Huertas	4,763.85		Heirs
159.	C	1840	Tejón	12,801.46		Heirs
160.	C	1851	Arquito		2,000	Government
161.	P		Pueblo of Sandía	23,922.85	(Pueblo lands now total 22,800 acres)	
162.	P		Pueblo of Santa Ana	17,360.56	(Pueblo lands now total 42,085 acres)	
163.	P		Pueblo of Zía	17,514.63	(Pueblo lands now total 110,267 acres)	
164.	P-G		Pueblos of Zía, Jemez and Santa Ana	See # 174 overlap	298,634	Pueblo Heirs and government
165.	I	1809	Rancho de la Santísima Trinidad		17,018.18	Government
166.	I-C	1786	San Isidro	11,476.88		Government
167.	P		Pueblo of Jémez	17,510.45	(Pueblo lands now total 88,387 acres)	
168.	I-G	1767	Ojo de Borrego	16,079.80		Jemez Pueblo

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
169.	G	1728	Peralta Grant	Forgery?	400,000	Government
170.	C	1768	Ojo de San José (Ponderosa)	4,340.276		Government
171.	C	1800 (prior)	Vallecito de Santo Toribio		100,000	Government
172.	C	1798	Cañón de San Diego	116,286.89		Largely Government
173.	I	1807	Ancón Colorado		800	Non Heirs
174.	C	1769	San Joaqúin del Nacimiento (Cuba)		131,725.87	Non Heirs
175.	I-G	1815	Ojo del Espiritu Santa (See # 163	113,141.15		Some Heirs, mostly Jemez and Zia Pueblos and Government
176.	I-G	1768	Joaqúin Mestas		3,632.94	Non Heirs
177.	I-G	1766	Bosque Grande	2,967.57		Some Heirs, mostly government
178.	C-G	1768	Chaca Mesa	47,258.71		Non-Heirs and Government
179.	I-G	1762	José Garcia		76,000	Government
180.	C	1753	Bernabé Montaño (N. Sra de la Luz y Lagunitas)	44,070.60		Laguna Pueblo and Government
181.	I	1759	Antonio Baca	46,653.03	8,012.05	Non Heirs
182.	I	1769	Agua Salada	13,702.78	3,008.30	Non Heirs
183.	I-G	1768	Cañada de los Alamos	4,106.66		Non Heirs
184.	C	1800	Cebolleta	199,567.92		Heirs 1/3, Non Heirs 2/3
185.	I	1768	Vertientes de Navajó (Carlos José Pérez de Mirabal)		11,480	Government
	BERNALILLO COUNTY					
186.	I-C	1710	Alameda	89,346.00	16,928.00	Heirs
187.	C	1724	Los Ranchos (Elena Gallegos)	35,048.78		Heirs - Others
188.	T	1706	Albuquerque	17,361.06		Heirs - Non Heirs
189.	I	1706	Francisco García (within town of Albuquerque)		4,000	Non Heirs

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
190.	C	1872	Los Candelarias, etc.			Heirs and Non Heirs
191.	C	1700	Atrisco	82,728.72		Heirs - Others
192.	C	1746	Pajarito	28,724.22		Heirs - Others
193.	C	1807	Los Lagunitas		43,653.446	Non Heirs
194.	I-G	1852	Bairds Rance		33,696	Government
195.	C	1818	Cañón de Carnué	2,000.59	85,999.41	Non Heirs-heirs government
196.	C	1840	San Antonito		32,000	Non Heirs-heirs
	MCKINLEY COUNTY					
197.	G	1766	Felipe Tafoya	4,340.23		Non Heirs
198.	G	1767	Bartolomé Fernández	25,455.24		Heirs - Others
199.	P		Pueblo of Zuñi	17,581.25	(Pueblo lands	now total 400,353 acres)
	VALENCIA COUNTY					
200.	P	1769	Rancho de Paguate	75,406.27		Laguna Pueblo
201.	C	1834	Cubero	16,628.56		Heirs - Others
202.	I-G	1768	Baltazar Baca	2,527.29	3,853.63	Laguna Pueblo
203.	P	1813	Rancho de San Juan	25,233.18 (this amount was divided by Ranchos San Juan, Gigante, and El Rito)		Laguna Pueblo
204.	P	1813	Rancho del Gigante			Laguna Pueblo
205.	P	1760	Rancho El Rito			Laguna Pueblo Total Laguna average 411,833 acres
206.	P		Pueblo of Laguna	17,328.91	(Pueblo lands	now total 411,833 acres)
207.	P	1813	Rancho de Santa Ana	871.33		Laguna Pueblo
208.	P		Pueblo of Acoma	95,791.66	(Pueblo lands	now total 234,414 acres)
209.	I-G	1768	San Mateo Spring	4,340.276		Non Heirs
210.	G	1819	Ojito de los Medanos		16,000	Non Heirs

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
211.	I	1769	Cañada de los Apaches	86,249.09		Isleta Pueblo
212.	P		Pueblo of Isleta	131,495.30	(Pueblo lands total 209,891 acres)	
213.	I-G	1845	Ojo de la Cabra		4,340.54	Non Heirs
214.	I	1716	Joaqúin Sedillo & Antonio Gutiérrez		22,636.92	Isleta Pueblo
215.	I-C	1716	San Clemente	37,099.29		Heirs - Others
216.	I-C	1718	Lo De Padilla	51,940.82		Peralta Tract and Isleta Pueblo
217.	I	1840	Nuestra Señora de Guadalupe Mine		16,000	Government
218.	I-C	1739	Nicolás Durán de Chavez	39,827.68		Heirs
219.	C	1739	Tomé	171,594.53		Heirs - Others
	TORRANCE COUNTY					
220.	I-G	1819	Bartolomé Baca		500,000	Non Heirs
221.	I-G	1845	Estancia		415,056.56	Non Heirs
222.	C	1829	Manzano	17,360.24		Heirs - Government
223.	C	1834	Tajique	7,185.55		Heirs
224.	I	1831	Nerio Antonio Montoya		3,546.06	Non Heirs
225.	C	1841	Chilili	41,481.00		Heirs - others

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
	GUADALUPE COUNTY					
226.	I-A	1838	Joseph Sutton (Ojo de Añil)		69,455.55	Government
227.	I-G	1824	Agua Negra	17,361.11		Heirs and Non Heirs
228.	I	1824	José Leandro Perea	12,712	5,000	Heirs
229.	I-G	1823	Preston Beck, Jr. (Juan Estevan Pino)	318,699.72		Non Heirs
230.	C	1842	Angostura del Pecos		120,000	Government
231.	C	1822	Antón Chico	258,537.50	120,000	Heirs, Preston Beck and Government
	SAN MIGUEL COUNTY					
232.	I-G	1824	Pablo Montoya	655,468.07		Non Heirs and Government
233.	I-G	1818	Antonio Ortiz	163,921.68		Non Heirs
234.	C	1846	Chaperito	6,419		Lots owned by Heirs
235.	I	1842	Ojo del Apache		28,000	Non Heirs
236.	I	1839	Chupaderos de la Lagunita		4,340	Government
237.	I-G	1824	Bernal Spring		20,000	Government
238.	C	1824	Tecolote	48,123.38		Heirs
239.	C	1794	San Miguel del Vado	5,207.73	310,093.07	Heirs
240.	C	1814	Los Trigos	7,342	2,304.56	Some Heirs, mostly Non Heirs
241.	P-C		Pueblo of Pecos	18,763.33		Non Heirs
242.	C	1815	Alexander Valle	1,242		Non Heirs
243.	C	1845	Los Manuelitas		200,000	Largely Non Heirs
244.	C	1839	Sanguijuela (Sapelló)		20,000	Largely Non Heirs
245.	I	1835	James Boney		6,000	John Scolly
246.	I	1843	John Scolly	25,000		Encroaching on Mora and Las Vegas Grants

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
247.	C	1835	Las Vegas	431,653.65		Heirs, Non Heirs 6,250 acres
248.	I-G	1820	Baca Locations (2 tracts)	99,289.39		Non Heirs
	MORA COUNTY					
249.	C	1835	Mora Grant	890,000		Largely Non Heirs, Government
250.	I-G	1845	Gervais Nolan		575,968.71	Government
251.	C	1837	Guadalupita(within Mora Grant)		47,743	Largely Non Heirs
252.	I-G	1837	Ocate		69,848	Non Heirs
	COLFAX COUNTY					
253.	I-G	1838	Uña del Gato		600,000	Non Heirs
254.	I	1678	"Corpos Cristo" (Benjamin Hodges	Fraud	696,960	Rejected
255.	I-A-G	1841	Maxwell	1,714,764.94		Non Heirs
	SOCORRO COUNTY					
256.	I-C	1819	Pedro Armendaris 33 and 34	447,534.5		Victorio Cattle Company
257.	I- -G	1845	Bosque del Apache	60,117.39		Government
258.	C	1817	Socorro	17,371.18	825,888.41	Heirs- Others
259.	C	1819	Sevilleta	261,187.9		Non Heirs (La Joya Game Refuge)
260.	I-G	1825	Arroyo de San Lorenzo		130,138.98	Government
261.	C	1823	Casa Colorado	21,689.06	110,090.31	Heirs- Town of Belen
262.	C	1740	Belen	196,663.75		Heirs- Others
263.	I-G	1845	San Acasio (within Sevilleta Grant?)		18,000	Government

	TYPE	YEAR	GRANT NAME	ACRES CONFIRMED	ACRES REJECTED	PRESENT OWNERSHIP
	GRANTS COUNTY					
264.	I-C	1801	Santa Rita del Cobre Mine	31.26		Kennecott Copper Corp.
	SIERRA COUNTY					
265.	I	1845	Jornada del Muerto		250,000	Government
	GUADALUPE MIRANDA					
266.	I-G	1856	Guadalupe Miranda		4,751	Government
267.	I-G	1853	Rómulo Barela		4,428	Government
268.	I-G	1790	Santa Teresa (Canutillo)	5,774.51		Heirs-Non Heirs
269.	I-G	1853	Juan Jose Sanchez		4,428	Government
270.	C	1850	Refugio Civil Colony (La Unión)	11,524.30		Heirs- Others
271.	I-G	1852	Jos Manuel Sánchez Baca (San Miguel)	3,530.6		Heirs- Others
272.	C	1853	Santo Tomás de Yturbide Colony	9,622.34		Heirs- Others
273.	C	1850	Mesilla Civil Colony	21,628.52		Heirs- Others
274.	C	1805	Brazito (Mesquite?)	14,808.075		Non Heirs
275.	I	1822	John Heath		108.000	Government
276.	C	1840	Doña Ana Bend Colony	35,399.017		Heirs- Others
	OTERO COUNTY (Las Cruces)					
277.	P-G	1828	Rancho de Ysleta*		823,608	Government*

*Recently, the United States Government restored Pueblo status to the Tiwa community of Ysleta but apparently only that portion of its land which is in Texas.